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ABSTRACT

The RAND Institute on Education and Training has undertaken an analysis of Federal policy options to improve education in low-income areas. Volumes I and II, separately published, have assessed the current Chapter I program and presented a strategy for reformulating the program with commentaries by invited contributors. This volume assesses Federal options for providing supplemental funding for the disadvantaged in the face of inequity in school finance. Instead of receiving the compensatory resources that Congress intended, Chapter 1 participants are likely to have less spent on their educations, notwithstanding Federal aid, than is spent in better-funded jurisdictions. The broad strategies that are examined are redistributing and perhaps augmenting Chapter 1 and other funds for the disadvantaged and leveling the state-local expenditure base. New large-scale Federal funding is recommended to reduce, but not to eliminate, interstate and intrastate disparities in per pupil spending. It could become possible to link state allotments of general aid to the equity of the state's school finance system. (Contains 13 references.) (SLD)

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Federal Policy Options for Improving the Education of Low-Income Students

Volume III
Countering Inequity in School Finance

Stephen M. Barro

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Federal Policy Options for Improving the Education of Low-Income Students

Volume III
Countering Inequity in School Finance

Stephen M. Barro

Supported by the Lilly Endowment Inc.

INSTITUTE ON EDUCATION
AND TRAINING

RAND's Institute on Education and Training conducts policy analysis to help improve education and training for all Americans.

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The United States faces the difficult challenge of improving the education available to students from low-income families. Because family income, family educational level, and student educational achievement are closely correlated, low-income children, in effect, often face a double handicap: They have greater needs than more affluent children, but they attend schools with substantially smaller resources.

Based on these broad considerations, the RAND Institute on Education and Training, in consultation with the Committee on Education and Labor, U.S. House of Representatives, undertook an analysis of federal policy options to improve education in low-income areas. The analysis focuses on Chapter 1 of the Elementary and Secondary Education Act of 1965, the nation's $6.1 billion program for assisting disadvantaged students in primary and secondary schools. It draws on (1) a comprehensive review of existing evaluation data on Chapter 1, (2) invited commentaries by 91 policymakers, researchers, and educators (teachers, principals, and administrators) describing the strengths and shortcomings of Chapter 1, and (3) a commissioned study of federal options for school finance equalization.

The results of the analysis are reported in this three-volume study.

- *Federal Policy Options for Improving the Education of Low-Income Students*, Volume I, *Findings and Recommendations*, MR-209-LE, by Iris C. Rotberg and James J. Harvey, with Kelly E. Warner, assesses the current Chapter 1 program and describes a strategy for reformulating the program to encourage fundamental improvements in the quality of education available to low-income students.
- *Federal Policy Options for Improving the Education of Low-Income Students*, Volume II, *Commentaries*, MR-210-LE, by Iris C. Rotberg, editor, with Kelly E. Warner and Nancy Rizor, provides the texts of the invited papers.
- *Federal Policy Options for Improving the Education of Low-Income Students*, Volume III, *Countering Inequity in School Finance*, MR-211-LE, by Stephen M. Barro, assesses federal options for providing supplemental funding for the disadvantaged in the face of inequity in school finance.

The Lilly Endowment Inc. funded the research. The study was completed in spring 1993, in time for congressional deliberations on the reauthorization of Chapter 1.

Georges Vernez
Director, Institute on Education and Training

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SUMMARY

Disparities in education spending among and within the states call into question the supplemental character of Chapter 1 funds.[1] Instead of receiving extra, compensatory resources as Congress intended, Chapter 1 participants in the poorer, fiscally less able states and school districts are likely to have less spent on their education—federal aid notwithstanding—than is spent on regular students in better-funded jurisdictions. Consequently, Chapter 1 is unlikely to help such pupils catch up educationally with more advantaged pupils in their own states and around the nation. In this report, two broad strategies for addressing this problem are examined:

- The redistribution and perhaps augmentation of Chapter 1 funds and other funds for the disadvantaged.
- The leveling of the state-local expenditure base.

REALLOCATING OR AUGMENTING FUNDS FOR THE DISADVANTAGED

The redistribution of Chapter 1 funds from high-spending to low-spending states and school districts can only partially solve the fiscal disparity problem: First, too little Chapter 1 money is available to compensate for interstate and interdistrict differences in regular per pupil spending. Second, too much redistribution would undercut the basic purposes of the federal compensatory education program. In addition, the political feasibility and—at the substate level—the technical feasibility of carrying out the required type of redistribution is in doubt.

The technical feasibility of redistribution among states is not at issue, as the federal government has full control over the formula that determines each state's share of Chapter 1 funds. Federal dollars could be shifted from richer, higher-spending to poorer, lower-spending states by a combination of (1) making poverty concentration a more important allocation factor and (2) building into the formula a negative relationship between aid and state fiscal capacity. However, even drastic reallocations of Chapter 1 funds—shifts that could decimate programs for the disadvantaged in the richer states—would compensate only fractionally for interstate disparities in regular per pupil spending. Of course, the need for painful reallocations could be avoided if

[1]Chapter 1 is shorthand for grants provided under Chapter 1 of Title I of the Elementary and Secondary Education Act of 1965 (ESEA), as amended.

total Chapter 1 funding were increased substantially, but new funds would have to be directed almost exclusively to the states with low revenue-raising ability to keep total costs reasonable.

Working within the existing Chapter 1 framework, the government could tilt the distribution of Chapter 1 funds toward poorer, generally lower-spending counties. It could achieve this goal to some extent by strengthening the poverty concentration factor and enlarging its role in the formula. A more effective method, however, would eliminate the present two-part system of basic and concentration grants and replace it with a single, consolidated formula that allocates a progressively greater amount of aid per poor child to counties with higher poverty percentages. Alternatively, or in addition, the government could shift funds toward the lower-spending counties by incorporating an inverse county per capita income factor into the formula.

A redistribution of funds among counties would not correct adequately, however, for fiscal disparities among local education agencies (LEAs). To deal more effectively with LEA-level inequality, the government would have to establish a new two-tier fund allocation system in which Chapter 1 funds were distributed first to states and then among the school districts in each state. But because of the diversity of state school finance systems and the lack of suitable national data, the federal government lacks the ability to distribute Chapter 1 funds directly to LEAs in a manner that takes local fiscal circumstances into account. The alternative of allowing each state to distribute Chapter 1 funds to LEAs according to federal rules and criteria seems reasonable in principle and deserves exploration, but past experience raises doubts about whether it would have the intended effects in practice. Offering incentives in the form of additional federal aid to states that distribute Chapter 1 funds in a way that offsets differences in regular per pupil spending appears to be a more promising method. Specific equalization measures and reward schedules would have to be developed to implement this approach, but the design problems appear manageable.

Efforts to redistribute funds for the disadvantaged need not stop with funds provided by the federal government. For instance, the federal government might require the wealthier states to match federal Chapter 1 dollars with dollars of their own. Moreover, incentives could be designed so that states could earn additional federal aid by distributing not only Chapter 1 funds but also their own funds for education of the disadvantaged in a fiscally equalizing manner.

LEVELING THE EXPENDITURE BASE

Although the reallocation of Chapter 1 funds would be a positive step, too little Chapter 1 money is available to offset more than a minor fraction of inequality in regular school spending. As a practical matter, if the government wants to make compensatory education supplemental by national or state standards, the strategy has to include leveling the state-local expenditure base.

The federal government's only serious option for reducing expenditure differences among states is to establish a large-scale program of federal general aid to education.

Such aid, distributed appropriately, undoubtedly could reduce interstate disparities substantially. A strong negative relationship would have to be established, however, between aid and state fiscal capacity. The degree of equalization achievable would depend on the scale of federal funding and on the government's steadfastness in channeling the new funds mostly, if not exclusively, to the lower-capacity states. Equalization would be costly. The federal government would have to spend as much again as it now spends on all its elementary-secondary aid programs combined to reach even a moderate standard of interstate equality. Clearly, a proposal for spending of that magnitude would have to rest on much broader educational and fiscal considerations than just improving the relative positions of disadvantaged pupils.

In theory, the federal government could attempt to reduce intrastate disparities in per pupil spending either by providing equalizing grants directly to LEAs or by allocating funds to states (pass-through grants) that the states would then distribute in a fiscally equalizing manner among their districts. Neither option appears workable, however, both for technical reasons and because of the excessive degree to which the federal government would have to become entangled in the details of each state's school finance system.

A much more promising strategy would offer federal incentives to states to equalize spending among their own districts. A crude form of incentive would make a state's eligibility for Chapter 1 funds contingent on a certain degree of interdistrict fiscal equality. Almost equivalently, the federal government could apply to whole states the requirement already imposed on LEAs to provide comparable resources to Chapter 1 and non-Chapter 1 schools. A major shortcoming of these methods, however, is their inflexible, all-or-nothing quality.

A more flexible incentive plan would offer rewards in the form of additional Chapter 1 funding (or penalties in the form of reduced funding) to states that meet (or fail to meet) specified standards of interdistrict fiscal equity. In effect, the equity of a state's school finance system (represented by a specified indicator of expenditure equality) would become one of the key determinants of the state's formula-based allocation of Chapter 1 funds. The effectiveness of this method would be limited, however, by the relatively narrow bounds within which Chapter 1 funds could be shifted to reward fiscal equity without undercutting the basic purpose of the Chapter 1 program.

Potentially the most effective incentive-based approach would build rewards for intrastate equalization into a new program of general-purpose federal education aid to the states. The size of each state's general grant would depend on one or more indicators of school finance equity. Under this approach, the incentives for equalization could be larger and the government could deploy them more freely than funds earmarked specifically for services to disadvantaged children. Although the federal government now provides no funds explicitly labeled general education aid, the existing Chapter 2 Block Grant program, suitably modified and enlarged, could provide the statutory foundation for fiscally equalizing general grants.

Equity measurement would be a central issue under any incentive plan, with millions of dollars hinging on the choice of a disparity indicator. We would have to confront the limitations of current measures—for example, that we lack the means to adjust

adequately for interdistrict differences in educational needs and costs. Until the equity measures are upgraded, the government would do well to build some leeway into an incentive scheme by permitting optional need and cost adjustments and allowing states to qualify for rewards according to alternative equity standards.

The government would also have to resolve other design issues, concerning, for example, the size and structure of rewards, the advisability of rewarding states for equity gains as well as for the level of equity attained, and the appropriateness of taking certain state characteristics (such as the number of districts) into account. None of the design problems seems insuperable, however, and none fundamentally alters the case for an incentive-based strategy.

CONCLUSIONS REGARDING PROMISING OPTIONS

My conclusions regarding which approaches are promising and worth pursuing necessarily depend on assumptions about the availability of new federal funds for elementary-secondary education. I consider the cases of little or no new federal money, significant funding increases (in the range of 50 to 100 percent of current expenditure on Chapter 1), and large-scale federal aid (a doubling or more of total federal expenditure for elementary and secondary education).

Even without new funding, the government could act to improve the relative positions of disadvantaged children in low-spending jurisdictions by redistributing Chapter 1 funds from richer to poorer states and localities. The relevant options include:

- Revising or eliminating the cost factor (per pupil expenditure) in the Chapter 1 funding formula to eliminate the present unwarranted skewing of the fund distribution toward richer, higher-spending states
- Tilting the distribution of aid in favor of high-poverty places, preferably by introducing a new, poverty-weighted formula that gives more aid per low-income child to places with higher concentrations of low-income children
- Compensating for inequality in state and local revenue-raising ability by incorporating an inverse state or county per capita income factor, or other fiscal capacity factor, into the formula
- Restructuring the formula so as to direct Chapter 1 funds to individual districts (rather than to counties) on the basis of local poverty and, perhaps, local fiscal circumstances.

A zero-sum environment, however, would offer low political prospects for major redistribution and preclude a federal effort to level the state-local expenditure base.

Significant increases in federal education funding would make some of the aforementioned options more potent and more palatable and would open up such additional options as:

- Allocating additional Chapter 1 funds by formula to lower-income, higher-poverty states, counties, or LEAs, while maintaining funding levels in most other jurisdictions
- Providing incentives, in the form of extra Chapter 1 funds, to states that distribute their Chapter 1 funds in a manner that compensates for local fiscal disparities
- Providing extra Chapter 1 funds to states that distribute their funds in a manner that compensates for local fiscal disparities.
- Establishing a system of incentives for intrastate equity based on general federal aid to education, perhaps by modifying and expanding the existing Chapter 2 Block Grant program.

The availability of large-scale new federal funding, in the range of $10 billion to $15 billion, would provide the means for major federal initiatives to reduce (but not eliminate) both interstate and intrastate disparities in regular education expenditure per pupil. Specifically, such funding levels would enable the government to pursue the dual strategy of (1) providing federal general education aid to states in a manner designed to reduce interstate disparities in per pupil spending, while (2) creating strong incentives for intrastate equalization by linking state allotments of general aid to the equity of each state's school finance system. At the same time, the government would also have the option of funding the Chapter 1 program at such a level, and in such a manner, that most if not all participants would receive supplemental services by state or national standards.

Chapter One

INTRODUCTION

The purpose of federal Chapter 1 grants for education of the disadvantaged is to provide supplemental educational services to participating, educationally deprived children.[1] These federally funded extra services are intended to compensate, at least in part, for the impediments to learning associated with living in low-income households or communities (hence the term *compensatory education*) and, thus, to reduce the gap in educational performance between such children and more advantaged ones. As a matter of simple logic, federal Chapter 1 grants can close this gap only if they actually translate into higher per pupil expenditures and, hence, more educational resources and services for participants in Chapter 1 than for the general pupil population.

But although Chapter 1 funds are supposed to buy supplemental services for the disadvantaged, the wide variation in levels of regular state and local education spending both among and within the states calls into question the supplemental character of Chapter 1 for children in the lower-spending jurisdictions. Some local education agencies (LEAs) may spend twice as much per pupil for regular education services (base expenditure) as other LEAs in the same state. Consequently, Chapter 1 participants in the lower-expenditure, often poor, districts may have less money spent on their education—even counting the nominally extra Chapter 1 funds—than is spent on more advantaged pupils in higher-spending, richer districts. Similarly, because some states spend more than twice as much per pupil as other states (even after adjusting for differences in the cost of education), less may be spent on disadvantaged Chapter 1 participants in the lower-spending states than on advantaged pupils in higher-spending states. Thus, instead of receiving the extra resources that might help them to catch up, Chapter 1 pupils in the lower-spending places may receive only average or below-average resources and fall still further behind.

To be more precise, I shall define *supplemental* in narrower and broader senses. According to the Chapter 1 statute and regulations, each LEA receiving Chapter 1 funds must provide to its Chapter 1 pupils more resources and services than it provides to its regular pupils. Among other things, the rules stipulate that Chapter 1 schools must receive state and locally funded services at least *comparable* to those received by the LEA's other schools; that the LEA must use Chapter 1 funds to *supplement, not*

[1]Chapter 1 is shorthand for grants provided under Chapter 1 of Title I of the Elementary and Secondary Education Act of 1965 (ESEA), as amended.

supplant, services provided with state and local funds; and that Chapter 1 funds may be used only to pay the *excess costs* (i.e., over and above regular per pupil spending) of specific programs and projects designed to meet the needs of participating educationally deprived children. To the extent that these rules are observed, Chapter 1 pupils should receive more funds, resources, and services than other pupils in their own LEAs. I refer to this as *narrow supplementation* or *LEA-level supplementation* to make clear that the standard of comparison is the level of regular per pupil spending, or base expenditure, in a particular LEA. Analogously, one may define *state-level supplementation* as the degree to which Chapter 1 participants receive more educational services than advantaged children in their own states and *national supplementation* as the degree to which Chapter 1 participants receive more services than advantaged children throughout the nation.

At present, however, the Chapter 1 legal framework neither requires—nor even recognizes—state-level or national supplementation. States have no obligation under the Chapter 1 statute to consider or to compensate for differences in regular per pupil expenditure across LEAs. No federal rule is violated if the Chapter 1 children in one LEA receive, say, $800 per pupil in federal Chapter 1 funds plus $4000 in state and local funds, while the *regular* children in a neighboring LEA receive $6000 in state and locally funded services. Likewise, at the national level, no provision ensures that one state's Chapter 1 pupils will receive more educational services than another state's advantaged pupils. Consequently, the education of low-income, educationally deprived participants in Chapter 1 may be less well-funded—federal aid notwithstanding—than the education of more fortunate children both in the same states and elsewhere around the nation.

It would not matter so much that Chapter 1 is supplemental only by local standards if individuals competed academically and economically only within their own community, but such is obviously not the case. The United States is a national economy, not a collection of isolated state or local economies. Children in Pike County, Kentucky (current education expenditure in 1989–1990: $2600 per pupil), need to be prepared to compete in the labor market not only against children from Jefferson County, Kentucky ($3900 per pupil), but also against children from Montgomery County, Maryland ($7300 per pupil).[2] Consequently, supplementation only in the narrow, local sense falls short of the broad, national goal of federal compensatory education policy, which is to put disadvantaged children throughout the United States on a more equal footing with their advantaged peers.

The problem that fiscal inequality poses for Chapter 1 has received only intermittent attention during the program's 27-year history. Recently, however, the topic has attained somewhat greater prominence. A report issued by the House Committee on Education and Labor, *Shortchanging Children: The Impact of Fiscal Inequity on the Education of Students at Risk* (Taylor and Piché, 1990), identifies fiscal inequality as a major obstacle to achieving federal goals with respect to educating the disadvantaged. More recently, the independent Commission on Chapter 1 (Hornbeck Com-

[2]These expenditure figures are rounded off from data for 1989–1990 presented in U.S. Bureau of the Census (1992).

mission) reached a similar conclusion, calling in its report for a new, statewide comparability requirement to equalize "essential educational services" across all districts in each state (Commission on Chapter 1, 1992). This attention may have raised the probability that the issue will receive serious consideration from Congress during the current debate over ESEA reauthorization.

This report examines what the federal government might do to make Chapter 1 more truly supplemental for the disadvantaged in the face of inequality in per pupil expenditure among states and LEAs. Broadly speaking, only two general strategies are available: reallocate the Chapter 1 funds themselves (either with or without enlarging the total Chapter 1 appropriation) so as to compensate for disparities in regular state and local education spending or reduce the disparities in the regular state-local expenditure base on which the supposedly supplemental Chapter 1 expenditures are superimposed.

Each strategy may be pursued at both the state and local levels. The federal government can redistribute Chapter 1 funds among states or among localities (counties or LEAs) in each state, and it can attempt to reduce disparities in regular education spending either among the states or among each state's local school districts. The government would have to address both the interstate and intrastate dimensions to deal fully with the adverse effects of inequality on the supplemental character of Chapter 1 funds. In general, different (although sometimes similar) policy options apply to the two levels.

The federal government has two main tools at its disposal for shifting resources toward lower-spending states or localities: direct funding and incentives. The direct funding options include changes in Chapter 1 allocations, either with or without increases in total Chapter 1 funding, and the distribution of new forms of federal aid, possibly including general-purpose education grants to states or LEAs. The incentive options include different forms of financial (or other) rewards or penalties for jurisdictions that distribute, or fail to distribute, funds in ways that support supplemental services for the disadvantaged.

The organization of this report reflects the foregoing classification of strategies and options. Following a background discussion (Chapter Two) of the relationship between fiscal inequality and Chapter 1, the two main chapters of the report deal with the two broad strategies set forth above. Chapter Three examines options for redistributing and augmenting Chapter 1 funds and, perhaps, other funds for the disadvantaged. Chapter Four discusses options for leveling the state-local expenditure base. In each of these chapters, I distinguish, first, between policies designed to deal with interstate and intrastate disparities and, second, between options involving direct federal aid and options based on incentives. A brief final chapter offers conclusions concerning the feasibility and likely effectiveness of the different approaches.

Chapter Two

CHAPTER 1 FUNDING IN RELATION TO GENERAL EDUCATION FUNDING

As background for the subsequent discussion of policy options, I bring together here some basic facts concerning interstate and intrastate inequality in education expenditure and the relationship of Chapter 1 funding to regular state-local spending for elementary and secondary education.

NATIONAL AVERAGE EXPENDITURES

Chapter 1 funds totaled $4.03 billion in 1989–1990, or about 2.2 percent of the $187.4 billion spent nationally for current operations of public elementary and secondary schools.[1] Of the 40.5 million pupils enrolled in public elementary and secondary schools in the same year, about 5.3 million, or about one out of eight, were said to be served under Chapter 1.[2] The average base expenditure per pupil in 1989–1990—that is, per pupil expenditure exclusive of Chapter 1 funds—came to $4,523, while Chapter 1 expenditure per Chapter 1 participant came to about $760. Roughly, then, the extra federal funding provided per Chapter 1 participant amounted to about 17 percent of the average outlay per regular elementary-secondary pupil.[3]

More recently, Chapter 1 funding has increased sharply. It rose to $4.8 billion in 1990–1991 and $5.6 billion in 1991–1992, and is budgeted at $6.1 billion for 1992–1993. How this increase in funding has affected spending per participant is unknown because data on numbers of participants are not available for years later than 1990–1991. A reasonable guess, based on past patterns, is that participation increased along with funding, but at a lower rate, placing the average Chapter 1 supplement per participant in the neighborhood of 18 to 19 percent of base expenditure.

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[1] $4.03 billion was the amount of Chapter 1 money available for use in school year 1989–1990. Because the program is forward funded, this corresponds to the amount appropriated in FY 1989 (1988–1989). The figure for total current expenditure for elementary-secondary education is from the National Center for Education Statistics (NCES, 1992).

[2] The estimate of 5.3 million participants is from Moskowitz, Stullich, and Deng (1993).

[3] This estimate of a 17 percent average Chapter 1 increment is rough because Chapter 1 funds are not distributed uniformly among places with different levels of per pupil spending. To the extent that such funds are more concentrated in relatively low-spending places, the ratio of Chapter 1 funding to total funding would be higher, on average, in places with Chapter 1 programs than one would infer from the overall national statistics.

These broad national averages, however, mask a more complex pattern of fund distribution. The pattern emerges when expenditure variations among and within states are considered.

EXPENDITURE DISPARITIES

Consider first the disparities in education spending among the states. In 1989–1990, the highest-spending state spent about three times as much per elementary-secondary pupil as the lowest-spending state, or something over twice as much after adjusting (roughly) for interstate differentials in the cost of education.[4] Average expenditure per pupil in 11 states fell short by at least $1000 of average expenditure per pupil in the nation. Spending per pupil exceeded $7000 in the five highest-spending states but fell below $3300 in the six lowest-spending states. Eighteen states spent $4000 per pupil or less; ten states spent $5500 per pupil or more. Chapter 1 funding, at only about $760 per participant, obviously could not overcome expenditure gaps of this magnitude, much less provide supplemental resources by national standards for pupils in the lower-spending states.

The degree of expenditure inequality among local school districts varies greatly from one state to another. Unfortunately, no study presents up-to-date disparity statistics for the 50 states. The most recent such studies (e.g., Wyckoff, 1990) pertain to school year 1986–1987.[5] However, the general pattern of inequality probably has not changed much over the intervening years. Studies of individual states show that while disparities have been reduced in some states—sometimes under court order—disparities in other states have increased. One may reasonably assume, therefore, that the general patterns shown in the 1986–1987 data differ little from the patterns of today.

Based on the assumption that expenditure disparities among LEAs remained about the same in relative terms as they were in 1986–1987, these are the patterns of inequality that one might have found in a "typical" state in 1989–1990:[6]

- The statewide average expenditure per pupil would have been about $4600 per pupil; a low-spending district (at the 5th percentile of the expenditure distribu-

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[4]In 1989–1990, current expenditure per pupil, unadjusted for cost differences, ranged from $7827 in the District of Columbia and $7526 in Alaska to only $2545 in Utah and $2921 in Idaho. I have adjusted the expenditure figures for differences in the cost of education among states using a rough state-level cost-of-education index constructed for NCES (Barro, 1992). Cost-adjusted expenditure per pupil varied in 1989–1990 from $6891 in the District of Columbia and $6607 in New Jersey to $2783 in Utah and $3368 in Idaho.

[5]The Census Bureau has recently released the district-level finance data needed to produce statistics on interdistrict disparity by state for 1989–1990, but no one, to my knowledge, has yet done these calculations.

[6]In 1989–1990, average current expenditure per pupil in the United States was about $4600 (NCES, 1992). According to Wyckoff (1990), the median state value of the coefficient of variation in current expenditure per pupil among local districts was about 0.15. The values described here as "typical" were obtained by assuming that values of per pupil spending are normally distributed among the districts of a state around a statewide average of $4600 per pupil, with a standard deviation equal to .15 times $4600, or $690 per pupil.

tion) would have spent about $3500 per pupil and a high-spending (95th percentile) district, about $5700.

- About one out of eight pupils in the state would have been enrolled in a district spending at least $800 per pupil less than the statewide average.
- A gap of about $1500 would have separated the average expenditure per pupil in the top quartile of districts from the average expenditure per pupil in the bottom quartile of districts.

Of course, not all states conform to this pattern. California, Iowa, New Mexico, North and South Carolina, and West Virginia, for example, had relatively minor interdistrict disparities in 1986–1987, while Massachusetts, Missouri, New York, Ohio, and Pennsylvania had much greater disparities than the "typical" state depicted above (Wykoff, 1990). But although inequality in spending among LEAs is not a major problem in all states, it is a problem in most—and a problem of sufficient magnitude to pose a serious threat to the accomplishment of Chapter 1 goals. To fully appreciate the implications of fiscal inequality, however, one must consider not only the variations in per pupil spending but also how these variations relate to differences in Chapter 1 funding.

RELATIONSHIP OF CHAPTER 1 FUNDING TO REGULAR EDUCATION SPENDING

A full assessment of the relationship between Chapter 1 funding and regular state-local education spending would require a statistical analysis of fiscal data for local school districts throughout the nation, but much can be inferred about the relationship, even without such an analysis, by considering the Chapter 1 funding mechanism itself. For the purpose of this discussion, the key facts about the Chapter 1 fund allocation process are the following:

- The federal government allocates Chapter 1 funds by *county;* a state's allocation is the sum of the allocations to all its counties.
- The federal government allocates Chapter 1 Basic Grants (90 percent of all Chapter 1 funds) among counties in proportion to the number of eligible poor children in each *county* (based mainly on the number of children from families with income below the poverty line, as reported in the decennial census) adjusted by a *state* per pupil expenditure factor, defined as state expenditure per pupil but not less that 80 percent nor more than 120 percent of national average expenditure per pupil.[7]

[7]In addition to children from families with income below the poverty line according to the decennial census, the count of poor children for formula purposes includes children from families above the poverty line that receive payments in excess of the poverty level from the program of Aid to Families with Dependent Children (AFDC), children living in institutions for neglected and delinquent children, and children being supported in foster homes with public funds. However, children from families with income below the poverty line account for more than 90 percent of all eligibles. For a more detailed description and explanation of the formula, see Barro (1991).

- In addition, the federal government allocates Concentration Grants (10 percent of Chapter 1 funds) to counties whose poverty count exceeds a certain threshold—namely, at least 15 percent of, or 6500, school-age children from families with income below the poverty line.[8]
- The state distributes Chapter 1 funds to the LEAs in each county (if necessary) in proportion to a state-selected indicator of the number of low-income children in each LEA.

At the state level, this fund allocation process yields a *positive* relationship between the amount of a state's Chapter 1 grant per low-income child and the state's level of regular state-local education spending per pupil. Specifically, the per pupil expenditure factor in the formula gives high-spending states up to 50 percent more federal aid than low-spending states per low-income child. The standard rationale for the per pupil expenditure factor is that it adjusts for interstate differentials in the cost of education, but in my view (Barro, 1991), per pupil expenditure is not a satisfactory cost proxy. It exaggerates cost differentials among the states, giving the high-spending states more federal aid and the low-spending states less federal aid than would a valid cost adjustment. But even without the per pupil expenditure factor, the interstate distribution would, at best, be neutral. Chapter 1 funds would not be distributed in a manner that reduced or compensated for interstate disparities in spending. With the per pupil expenditure factor, the federal formula exacerbates fiscal inequity by giving more compensatory education dollars per poor pupil to the already high-spending states.

The distribution of Chapter 1 funds within each state is based only on the number of low-income children in each county and LEA; no allowances are made for differences in spending, wealth, or fiscal capacity. Counties with larger percentages of poor children receive proportionately larger grants, but the only difference in the amount of federal aid *per low-income pupil* is between counties that do and do not qualify for Concentration Grants. Because about three-fourths of all poor children live in counties that do qualify for such grants (Barro, 1991), the Concentration Grant program, as currently configured, obviously does little to channel aid to places with the more serious problems. Funds are allocated to the LEAs in each county simply in proportion to numbers of poor children, favoring neither LEAs with high poverty concentrations nor LEAs with limited ability to finance their schools. The most one can say of the federal funding mechanism, therefore, is that it does not worsen intrastate expenditure disparities. Clearly, it does little to reduce disparities in the service levels that different districts can provide, either to their Chapter 1 participants or to their general pupil populations.

A complication in evaluating the relationship between Chapter 1 funding and regular funding is that it is essentially up to the states, or the individual LEAs, to decide how many pupils to serve with the available Chapter 1 funds. If two states receive equal

[8]Each county eligible for a concentration grant receives an allocation proportional to its Basic Grant per eligible child, multiplied by the greater of the number of its eligible children (if more than 15 percent of children ages 5–17) or the number of eligible children in excess of 6500. For further details, see Barro (1991).

Chapter 1 aid per low-income child but one concentrates its funds while the other spreads them thinly, the first will report higher spending per participant than the other. The most recent annual report on Chapter 1 participation (Sinclair and Gutmann, 1991) shows that although most low-spending states spend relatively little per Chapter 1 participant (e.g., Utah, $457; Idaho, $529; and Alabama, $629 in 1988-1989, compared with a U.S. average of $756), some spend considerably more (e.g., South Carolina, $1066). Moreover, while some high-spending states spend relatively large amounts of Chapter 1 money per participant (e.g., New York, $1123; the District of Columbia, $1324), others spend much less (e.g., only $702 in Connecticut and $726 in New Jersey). Given the flexibility that states enjoy in selecting and counting "participants," these figures should not be taken too literally. Nevertheless, they underscore the point that the relevant variable is not actual Chapter 1 outlay per participant—a statistic strongly influenced by state policy—but rather some measure of *potential* outlay per participant (based, for example, on the national average participation rate).

The following key points emerge from this brief look at expenditure patterns: First, substantial inequality exists in regular education spending per pupil both among and within states. The interstate and intrastate differences in base expenditure are often large relative to the amounts of federal Chapter 1 money available per Chapter 1 participant. Second, Chapter 1 funds are distributed neither among nor within states in a way that offsets disparities in regular spending. At the state level, Chapter 1 funding actually amplifies fiscal disparities; within states, its effect is approximately neutral. In sum, the present Chapter 1 funding mechanism has not been designed to make federal aid supplemental, except in the narrowest, most local sense, in the face of an inequitable system of general education finance.

Chapter Three

OPTIONS FOR REDISTRIBUTING AND AUGMENTING FUNDS FOR THE DISADVANTAGED

This chapter addresses the following question: Given the substantial inequality in regular per pupil spending both among and within states, what can the federal government do to provide disadvantaged pupils in lower-spending jurisdictions services that more nearly approximate, if not exceed, those available to advantaged pupils in higher-spending jurisdictions? The main approach considered is changing the Chapter 1 fund allocation formula, either with or without adding to the total funds available, so as to redistribute funds in a manner that offsets differences in regular state and local education spending. This redistribution could involve shifts of funds among states, counties, or LEAs. In addition, I examine the possibility that the government could achieve the same end by providing incentives for states to channel additional funds (not only federal funds but also funds of their own) into services for disadvantaged children in low-spending LEAs. I focus first on options for reallocating funds among states and then on options for redistributing funds among districts.

REDISTRIBUTION OF CHAPTER 1 FUNDS AMONG STATES

If the federal government were to allocate more Chapter 1 funds to poorer, lower-spending states, such states would be able to increase total spending per Chapter 1 participant. As a result, participants in those states would be somewhat more likely than they are now to receive supplemental services by *national* standards, or at least would fall less far below national standards than under the current funding arrangement. I illustrate with the example of Arkansas.

In 1988–1989, Arkansas augmented its base expenditure of $3124 per pupil with an average of $672 in federal funds per Chapter 1 participant. The resulting total, $3796 per Chapter 1 participant, fell short by 16 percent of the national average expenditure per regular pupil of $4523. Taking into account, however, the fact that the cost of education in Arkansas was only about 81 percent of the average cost of education in the United States, the real (cost adjusted) spending per Chapter 1 participant in Arkansas may have been about 3.6 percent greater than the average real expenditure per non-Chapter 1 participant in the nation. Nevertheless, this modest supplement falls well below the 18 to 20 percent increment in spending that Chapter 1 provides to participants nationwide. I estimate that Arkansas would have had to spend $4396 per Chapter 1 participant in 1988–1989 to provide a 20 percent supplement by national standards. To reach this level of spending, the federal government would

have had to increase the state's allotment of Chapter 1 funds by 89 percent (holding the number of Chapter 1 participants constant), or by $600 per pupil served.[1]

Because the federal government fully controls the distribution of Chapter 1 funds to the states through a statutory formula, the technical feasibility of reallocating funds is not at issue. The relevant questions are whether Chapter 1 funds should be redistributed and, if so, in what way and to what degree.

If total Chapter 1 funding is fixed, the only way for the government to provide more aid per participant to lower-spending states is to divert funds away from the higher-spending states. Several changes in the funding formula would result in such redistribution. Replacing the present per pupil expenditure factor with a more valid cost index would shift funds slightly in the stipulated direction. Eliminating the per pupil expenditure factor entirely would have a more substantial effect: Allocations to each of the lowest-spending states would increase by about 21 percent; allocations to each of the highest-spending states would fall by about 19 percent (Barro, 1991). Still larger redistributive effects could be obtained by incorporating into the Chapter 1 formula an inverse state income or state fiscal capacity factor of the type now found, for example, in the formula for distributing federal vocational education grants to the states. Such a factor can be calibrated to tilt the distribution of aid toward low-income or low-capacity states, hence toward low-spending states, to virtually any desired degree.[2]

An increase in the degree to which Chapter 1 allocations are based on poverty concentration would also redistribute funds. Currently, only about 10 percent of Chapter 1 aid is distributed as Concentration Grants, and even that 10 percent is only mildly concentrated in states with high percentages of poor children because of the overly broad way in which poverty concentration is now defined in the law (Barro, 1991). Several modifications of the formula would give poverty concentration more weight. But although the effect of these changes, on average, would be to shift funds toward poorer, lower-spending states, this would not always be the result. For example, because such high-income states as New York and California have above-average child poverty percentages, they would be among the gainers. (This result may not seem undesirable, however, when intrastate as well as interstate differences in poverty are taken into consideration—a point I return to later.)

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[1] The estimate that the cost of education in Arkansas is about 81 percent of the national average cost of education is from a study of interstate cost differentials in 1987–1988 (Barro, 1992). Based on that estimate, Arkansas's total expenditure of $3796 per Chapter 1 participant translates into a cost-adjusted figure of $4686, or 3.6 percent more than the national average base expenditure of $4523. To provide a 20 percent supplement by national standards, Arkansas would have had to spend the equivalent of $5428 per Chapter 1 pupil (measured in national prices), which translates into 81 percent as much, or $4396 per Chapter 1 pupil in Arkansas.

[2] The per capita income factor in the federal vocational education aid formula has the mathematical form [1 - 0.5(STATEPCI/USPCI)], where STATEPCI is the state per capita income and USPCI is the average U.S. per capita income. This factor takes on lower values for states with higher per capita incomes. Thus, its effect in the formula is to produce a negative relationship between per capita aid and per capita income. In the case of vocational education, the factor is bounded so that it can vary by no more than 50 percent among states, but the formula could be altered, if desired, to produce a more steeply negative relationship between per capita income and aid. See Barro (1991).

An approach that the government should *not* consider is explicitly allocating more Chapter 1 funds to states with low education outlays per pupil. Doing so would reward states for low spending and could have a perverse incentive effect on support for all education, including education for the disadvantaged. Allocating extra aid to states with limited *ability* to finance education (i.e., low per capita income or fiscal capacity) would make more sense. The overall redistributive effects would be similar, although allocations to particular states would differ because states vary not only in fiscal capacity but also in the fiscal effort that they exert to support elementary-secondary education.[3]

To what extent might redistribution improve the relative positions of Chapter 1 participants in the low-spending states? It is difficult to say without testing specific formula changes empirically, but at least some order-of-magnitude estimates can be given. As already mentioned, the elimination of the per pupil expenditure factor in the present formula would increase Chapter 1 fund allocations in the lowest-spending states by about 21 percent—an increase that would translate, assuming fixed numbers of participants, into expenditure increments of perhaps $150 to $200 per pupil served. This is only a minor fraction of the amount by which expenditure in the low-spending states falls below the national average.

A more substantial reduction of interstate fiscal disparities would require a radical redistribution of Chapter 1 dollars. To illustrate, in 1989–1990 the transfer to the lowest-spending one-third of the states of 50 percent of all Chapter 1 funds then received by the highest-spending one-third would have increased Chapter 1 funding in the gaining states by about $420 per Chapter 1 participant. But even so drastic a shift of funds—which is probably beyond the bounds of political feasibility—would have offset only about one-fifth of the gap in per pupil expenditure between the upper one-third and the lower one-third of states.[4] States in the lowest third still would not have been able to fund Chapter 1 services at levels that are supplemental by national standards. Therefore, although interstate redistribution of Chapter 1 funds could ameliorate interstate disparities, it could only partially solve the fiscal inequity problem.

Interstate redistribution of Chapter 1 funds also has other drawbacks that need to be considered. First, if total Chapter 1 funds were held constant, grants to the higher-spending states would have to be reduced. Such states would be forced either to serve fewer pupils or to reduce Chapter 1 expenditure per pupil served (unless they could be induced to offset the losses with their own funds—a possibility examined later). In other words, the price of making disadvantaged children in the poorer states better off by *national* standards is to make disadvantaged children in the richer

[3]Fiscal capacity refers to the ability of a state or locality to raise revenue (in this case, for education) from its own sources. Indicators used to represent fiscal capacity include per capita income and per capita gross state product (GSP). Fiscal effort is the degree to which a state or locality actually uses its capacity to raise revenue. For example, if fiscal capacity were measured by GSP per capita, then fiscal effort would be measured by the ratio of state education revenue per capita from own sources (i.e., exclusive of federal aid) to state GSP per capita.

[4]These calculations are based on data on enrollment and per pupil expenditure by state from NCES (1992) and data on Chapter 1 funding and participation by state from Sinclair and Gutmann (1991).

states worse off by *state* standards. The government cannot avoid this sort of trade-off as long as substantial interstate inequality persists in regular per pupil spending.

Second, the higher-income, higher-spending states (e.g., Michigan, New York, Pennsylvania) contain some of the nation's worst concentrations of urban poverty. Reducing the compensatory education resources available to inner-city schools in such states would conflict with the goal of improving educational opportunities and services for low-income children. Remedies may exist for this problem, such as the previously mentioned option of redistributing federal aid at least partly according to poverty concentration. Nevertheless, the prospect of perverse and unintended distributional effects suggests that redistributing Chapter 1 funds among states, by itself, is too crude a policy to produce the intended benefits for the disadvantaged.

Third, states that benefited from redistribution would not necessarily increase resources per Chapter 1 participant. Instead of spending more per pupil served, such states might choose instead to expand enrollment in Chapter 1. There would be more Chapter 1 participants, but none would receive services superior to those provided to regular pupils in wealthier states. This is not to say that expanding participation is a bad idea. One may reasonably argue, on grounds of both equity and educational urgency, that it is more important to broaden the coverage of compensatory education, even if the level of service falls short of national norms, than to provide high levels of funding to a lucky minority of the poor. Nevertheless, the issue at hand—that privileged children in some states receive better services than Chapter 1 participants in other states—would not be resolved if the gains from redistribution were used to spread services more widely.

Of course, most negative effects of redistribution could be avoided by substantially increasing total Chapter 1 funding. Expenditure per pupil served in compensatory education could simultaneously be increased in the lower-spending states and at least held constant in the higher-spending states. As a rough estimate, in 1988–1989 the government would have had to spend about $2.4 billion new Chapter 1 dollars, in addition to the $4 billion actually available, to give each Chapter 1 participant 20 percent more resources than the average regular pupil in the nation received.[5] But the foregoing presumes—highly unrealistically—that all the new Chapter 1 funds would have been allocated exclusively to the lower-spending states. Were it necessary politically to spread the new funds more widely, a much larger increase in Chapter 1 funding—perhaps two or three times as much—would have been required to achieve the same result.

An additional point to consider in connection with increased funding is that new funds for compensatory education need not consist exclusively of federal aid. Perhaps the federal government could induce states to assume some of the cost themselves. For example, it could require states to match federal Chapter 1 funds. Specifically, a new Chapter 1 formula might require that the state share of total

[5]The national average level of expenditure per pupil, exclusive of Chapter 1 funds was $4212 in 1988–1989; thus, the government would have had to spend an extra $842, or a total of $5054, per Chapter 1 participant to provide the specified 20 percent supplement.

compensatory education outlay vary inversely with state fiscal capacity. The cost-sharing formula might provide, for example, for continued 100 percent federal funding of Chapter 1 for low-capacity states, but for high-capacity states to match federal funds at rates positively related to ability to pay. The state share might range, for example, from 10 percent for states with just-above-average fiscal capacity (measured, say, by gross state product per capita) to perhaps 30 or 40 percent for the richest states. Such an arrangement would enable the federal government to provide additional Chapter 1 funds to the poorer, lower-spending states while maintaining service levels for Chapter 1 participants in the richer states. The arrangement would also reduce the impact on the federal budget. In effect, the richer states would pay for redistribution directly, rather than through the indirect route of higher federal taxation to support a larger Chapter 1 appropriation.

REDISTRIBUTION OF CHAPTER 1 FUNDS WITHIN STATES

The rationale for redistributing Chapter 1 grants among local jurisdictions parallels that for redistributing funds across states: Larger Chapter 1 grants can compensate to some degree for the less-adequate base programs of poorly funded local school districts. They can bring total outlay per Chapter 1 participant in such districts closer to, if not up to or above, regular spending per pupil in the better-funded districts.

Both the case for redistribution and the potential effects can be illustrated with a simple example: Suppose that a state's average expenditure per regular pupil is $5000, that regular expenditure in one of the state's poorer LEAs is only $4000 per pupil, and that Chapter 1 provides a uniform $800 per participant statewide. Even with Chapter 1 aid, total funding per Chapter 1 participant in the poor LEA amounts to only $4800, which falls short of average base expenditure in the state. To be supplemental by state standards, Chapter 1 funding in the poor district would have to rise sharply to $1800 per participant, rather than to $800, to match the $5800, on average, spent per Chapter 1 participant in the state's average-spending LEAs.

The feasibility of shifting funds among LEAs in the manner suggested above depends in part on whether the existing structure of the Chapter 1 fund allocation formula is retained. Under current law, funds are first distributed to all counties in the nation and then allocated by the states, where necessary, among the LEAs in each county. This arrangement virtually precludes the redistribution of funds in a manner that reflects the fiscal circumstances of each LEA relative to those of other LEAs in the same state. The creation of a new, two-tier formula that first allocates funds to states and then distributes them among the LEAs within each state would facilitate a distribution designed to offset interdistrict fiscal disparities. Because the prospects for such restructuring are uncertain, I discuss options under both the present Chapter 1 framework and the two-tier structure.

Options Within the Present Chapter 1 Framework

The present fund allocation framework does not allow the federal government to redistribute funds directly among LEAs. The government can, instead, redistribute

funds among counties and/or change the rules governing the subcounty allocation by states. The possibilities for shifting Chapter 1 funds toward poorer, lower-spending counties parallel the already discussed options for shifting funds among states. Such possibilities include giving substantially greater weight to poverty concentration and allocating funds in an inverse relationship to fiscal capacity, as measured roughly by county per capita income.

At least four different methods could be used, singly or in combination, to further tilt the distribution of Chapter 1 funds toward high-poverty counties:

- Increase substantially the fraction of total Chapter 1 funds distributed as Concentration Grants—from the present 10 percent to, say, 30 or 50 percent
- Raise the poverty thresholds at which counties qualify for Concentration Grants, thereby shifting funds toward those with higher poverty
- Limit eligibility for Chapter 1 funds (both Basic and Concentration Grants) to counties above a certain poverty concentration threshold
- Eliminate the distinction between Basic Grants and Concentration Grants in favor of a single, consolidated formula that gives progressively greater weight to poor children in counties with higher poverty percentages.

The first three options are straightforward because they involve nothing more than changing the parameters of the existing Chapter 1 formula. The fourth option—which may be the most promising—calls for further explanation.

A poverty-weighted formula would embody the principle that locations with higher percentages of poor children should receive more Chapter 1 funds per poor child. Under such a formula, the allocation of each county (or each LEA, if the system were restructured) would be based on a weighted count of its poor children. The weight would reflect the percentage of all children in the county or LEA (ages 5 to 17) who are poor. To illustrate, weights might be assigned to counties as follows:

Percentage of Low-Income Children in District	Weight per Low-Income Child
Up to 20	1.00
Over 20 but not more than 40	1.25
Over 40 but not more than 60	1.60
Over 60	2.00

Such a formula would give an extremely poor urban or rural district (with, say, 70 percent of its children from families with income below the poverty line) twice as much Chapter 1 money *for each low-income child* as an upper-income suburban district with, say, only 8 percent of its children from poor families.

Under a more sophisticated version of this poverty-weighted formula, the weight per low-income child would be calculated for each county according to a continuous sliding scale. This would avoid certain inequities that could occur with a set of

discrete thresholds such as those shown above—for example, a county with 59.5 percent poor children falling just short of qualifying for the maximum weight of 2.0 for each low-income child. Other variants of the poverty-weighted formula could also be designed, including versions that take into account the number of children in a county who attend high-poverty schools.

The advantage of these weighted formulas is that they calibrate the amount of Chapter 1 aid to the degree of poverty concentration in a county. This contrasts with the all-or-nothing aspect of the present formula, under which a county either does or does not qualify for Concentration Grants, and a county with 70 percent poor children receives the same aid per low-income child as another county in the same state with only 15 percent poor children. In addition, under the weighted-formula approach, the relationship between Chapter 1 funding and the severity of poverty would be built into the formula rather than determined anew each year by the Basic Grant and Concentration Grant appropriations.

As an alternative to redistributing aid on the basis of poverty concentration, the government could attempt to shift Chapter 1 funds toward poorer, lower-spending school districts by distributing aid in an inverse relationship to county per capita income. County-level per capita income data are produced annually by the Bureau of Economic Analysis (BEA) in the Department of Commerce. Exactly the same kinds of inverse income formulas could be applied to the 3000-plus counties as to the 50 states. For instance, an analog of the above-mentioned federal vocational education funding formula could be applied at the county level, as could various formula types now used by states to distribute education aid to LEAs in an inverse relationship to local fiscal capacity. (Some of these formula types are described in Chapter Four in connection with proposals for general federal education aid.)

Although these changes would shift funds from higher- to lower-spending areas, little more can be said about the extent of these shifts without analyzing specific new formulas empirically. Pending such analysis, I offer the following general observations about the implications of redistributing aid in favor of higher-poverty or lower-income counties.

Redistribution among counties would be a more discriminating policy than the previously discussed option of redistributing funds among states. It would target particular areas within states for increased or reduced Chapter 1 funding, rather than treating whole states as if they were educationally, economically, and fiscally homogeneous.

The degree to which such redistribution could overcome fiscal inequality is limited, however, by the far-from-perfect correlation between poverty or per capita income and education expenditure per pupil. For example, a county with below-average per capita income and above-average poverty sometimes has above-average ability to support its schools by virtue of a high concentration of taxable property within its boundaries. Schwartz and Moskowitz (1988), among others, have shown that the correlation between district poverty and education expenditure per pupil is positive in some states. Perhaps this positive relationship reflects the expenditure of funds on programs for pupils with special needs who are concentrated in high-poverty

districts. Nevertheless, it implies that strengthening the role of poverty concentration in the fund allocation formula will not necessarily shift Chapter 1 funds toward lower-spending areas.

Moreover, the relationship between county income or poverty and the level of education expenditure per pupil is likely to be weak in states that have established relatively equitable school finance systems. In such states, the redistribution of Chapter 1 funds as suggested above might redirect resources toward counties that, though relatively poor, do not necessarily have poorly funded schools. Such an outcome, however praiseworthy, would do little to redress the extra disadvantages faced by poor children in low-spending school systems.

A plan limited to redistributing funds among counties obviously can do nothing to offset the substantial fiscal disparities sometimes found among the LEAs in a single county. The subcounty allocation rules would have to be altered to deal with this dimension of the problem. Under the current rules, states allocate Chapter 1 funds among the LEAs of each county in proportion to the number of poor children, using a state-selected indicator of poverty. To offset intracounty fiscal disparities, states would have to use more complex formulas, allocating funds simultaneously in proportion to poverty and in an inverse relationship to LEA wealth or fiscal capacity.

Each state could deal easily with the disparities among its own LEAs, but the federal government's ability to prescribe a nationally applicable formula for such allocations is questionable. Moreover, the combination of a county-level allocation based mainly on poverty and a subcounty allocation based partly on fiscal capacity could generate new forms of interdistrict inequity (a district in a high-poverty county would receive more aid than an otherwise identical district in a low-poverty county). If the objective is to offset local fiscal disparities with Chapter 1 funds, allocating first to counties and then to LEAs within counties is the wrong approach. Restructuring the formula to allow for a statewide distribution among LEAs—the option discussed next—is a more promising solution.

Options Within a Restructured Fund-Allocation System

A restructured, two-tier system—a first-tier allocation among states, followed by a second-tier allocation among the LEAs in each state—would open up new opportunities for distributing Chapter 1 funds to LEAs in a way that would compensate for interdistrict disparities in regular education expenditure per pupil. Assuming that the necessary restructuring had been accomplished, the federal government would have, at least in theory, three broad options for distributing Chapter 1 funds in the desired manner. It could

- Attempt to produce the desired interdistrict distribution directly by prescribing a substate allocation formula that takes the fiscal circumstances of LEAs into account
- Try to control the distributions less directly by requiring states to allocate funds among their LEAs according to federally prescribed rules or criteria

- Take the least direct approach of offering incentives to states to allocate the federal Chapter 1 funds—and perhaps additional state funds—in the desired manner.

The Direct Approach: Substate Allocation by Federal Formula. Theoretically, the federal government could write a formula for apportioning state subtotals of Chapter 1 money among each state's LEAs. It does, after all, allocate funds directly to LEAs under such federal education aid programs as Aid for Education of Individuals with Disabilities and Mathematics and Science Grants. Three obstacles, however, make the same direct approach unworkable in the case of Chapter 1.

First, the federal government does not have the data it would need to distribute Chapter 1 funds directly to districts in the intended fiscally equalizing manner. The law now prescribes a county-level Chapter 1 formula, with subcounty allocations left to the states, because national data on the incidence of child poverty by LEA do not exist. This particular data gap may soon be filled, thanks to the ongoing effort of the Census Bureau to map 1990 Census of Population data onto school district boundaries.[6] Even if usable LEA-level poverty data become available, such data alone will not provide the means of taking local fiscal circumstances into account. To allocate Chapter 1 funds so as to offset fiscal disparities, the government would need not only poverty data but also data on the wealth or fiscal capacity of each local district. The lack of such national data—or even of standard national definitions of wealth or capacity—seems to preclude direct federal allocation to LEAs in a manner that takes local fiscal circumstances into account.

Second, even if all the necessary LEA-level data were available, the government would have trouble writing a nationally applicable formula because of the diversity of state school finance systems. State and local roles in financing education, and hence the relationship of local wealth to school spending, vary greatly from one state to another. In some states, most education revenue comes from the state government, with only a minor fraction raised locally; consequently, factors like local wealth or the size of the local tax base are unimportant. In other states, the state share of education funding is small, most school revenue is raised locally, and inequality in the local tax base translates into substantial disparities in per pupil spending. Because state school finance systems vary so widely in these respects, a federal formula that made sense in one state would not necessarily make sense in another. For example, the federal objective in a high-disparity state presumably would be to skew the Chapter 1 distribution sharply in favor of low-spending LEAs, but the preferred outcome in a fully equalized state might be a relatively flat distribution of Chapter 1 funds per low-income pupil. A formula sufficiently complex and subtle to fit the circumstances of all 50 states probably could not be designed.

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[6]The Census Bureau's mapping project will provide district-level estimates of selected variables from the 1990 Census of Population, including the number of children from families with income below the poverty line. The availability of these district-level poverty data might make it feasible to allocate funds according to the existing poverty-based Chapter 1 formula directly to LEAs, but whether the quality of the estimates would be considered satisfactory for this purpose remains to be seen.

Third, the notion that the federal government can distribute Chapter 1 funds to offset disparities in regular local spending per pupil rests on the unrealistic premise that states and LEAs will behave passively. A federal formula would produce the desired results (setting aside the difficulties already mentioned) only if the states did nothing to counteract federal redistributive policies. In fact, states have both the motive and the means to reallocate their own education funds in an offsetting manner. All that would be necessary, if a state considered the federal Chapter 1 formula overly favorable to the lower-spending or lower-capacity LEAs, would be a countervailing reduction in the equalizing effect of the state's own school finance formula. Federal policymakers could do little to prevent such defensive responses.

I conclude that direct redistribution of federal Chapter 1 funds among LEAs is an unpromising strategy. A reasonable federal formula probably could not be developed or, if developed, probably would not have the intended effects. If the federal government wants Chapter 1 funds to offset differences in local ability to finance education, it will have to use a strategy that allows the details to be worked out one state at a time.

The Less Direct Approach: Allocation by States According to Federal Rules. Consider next whether the federal government can do indirectly what it cannot do directly: divide the available Chapter 1 money among the states and then prescribe rules by which each state would distribute the funds to LEAs so as to offset disparities in regular per pupil spending. I do not know the answer. The problems of such a strategy are formidable, and the history of such efforts in other federal education aid programs is not encouraging. Certain approaches conceivably could work, however, and deserve to be explored. The federal government could prescribe either the methods that states must use to distribute Chapter 1 funds among their LEAs or the required distributional outcomes. I explain briefly what each option entails.

The government could require each state to use a state-designed formula of a federally prescribed type. This is the approach now used in the Chapter 2 Block Grant program, under which states are supposed to distribute federal aid according to (1) the number of school-age children and (2) the percentage of special-need, costly-to-serve children in each LEA, but are free to determine for themselves both how to measure the latter factor and how to incorporate it into the formula.

A similar approach was used from 1976 to 1984 under the Vocational Education Act, which directed states to take into account, among other things, local fiscal capacity, concentrations of special-need students, and concentrations of low-income families in allocating federal aid among their LEAs. In the vocational education case, unfortunately, the intended results were not achieved. Taking advantage of gaps and contradictions in the rules, states manipulated the system so as to end up with essentially flat distributions of aid or with the distributions of their choice (Benson et al., 1981). In considerable degree, however, the internal inconsistency and lack of specificity of the federal requirements contributed to this failure. The same problems would not necessarily recur in connection with Chapter 1 if the federal specifications for state formulas were more detailed, precise, and rigorously formulated.

Alternatively, instead of attempting to prescribe fund allocation methods, the federal government could focus on allocative outcomes. Specifically, it could establish the degree to which the distribution of Chapter 1 funds within a state must favor lower-spending or lower-wealth LEAs. For example, the government might require that:

> A state shall distribute its Chapter 1 funds so that each LEA with regular per pupil spending below that of the median district receives sufficient *extra* Chapter 1 funds per Chapter 1 participant to offset at least one half the difference between regular per pupil spending in that LEA and regular per pupil spending in the median district.

Obviously, this hypothetical rule is crude. It can be faulted for not taking account of such important factors as variations in size, cost, and fiscal effort among LEAs. It can also be criticized, depending on one's perspective, either for being too weak or for not going far enough. Nevertheless, it illustrates the strategy of specifying a result to be achieved rather than a specific method or formula for achieving it. In real life, it would take considerable ingenuity to develop specifications that take relevant local characteristics into account and that fit the circumstances of both highly equalized and highly unequal states. It is at least possible, however, that workable rules could be devised.

Any such federal rules, of course, would have to be enforced. Presumably, the U.S. Department of Education would have to monitor substate allocations, evaluate each state's compliance, and apply sanctions to violators. Past experience raises doubts about whether such enforcement efforts would be effective. In the Chapter 1 program, for instance, a combination of inadequate enforcement resources and prolonged administrative and legal proceedings has diluted such key fund allocation provisions as the "supplement, not supplant" requirement. Thus, the practical difficulty of implementation, as much as or more than the problem of formulating an appropriate rule, may be the real obstacle to this method of distributing Chapter 1 funds more equitably.

The Least Direct Approach: Federal Incentives to States. Under an incentive approach, the government would not require states to allocate funds for the disadvantaged in a fiscally equalizing manner but would reward them if they did. The rewards could consist of increments in Chapter 1 funding, but other forms of federal aid, perhaps including unrestricted grants, might be offered as well. Such incentives could be structured in many ways. Particular measures and standards of fiscal equalization would have to be chosen. These are discussed at some length in connection with general federal aid to education in Chapter Four. In addition, a schedule or formula would be needed to link each state's score on the specified equity indicator to the reward, if any, to which the state was entitled. Many details would have to be worked out to create fair and workable criteria, but the difficulties do not seem insuperable. It is certainly more feasible for the federal government to measure how well each state's own allocation process has worked than to try to devise a nationally applicable federal formula.

The scope of incentives would not necessarily have to be limited to federal Chapter 1 funds. This attribute distinguishes the incentive approach from the other approaches discussed above. States could be rewarded for allocating not only federal

dollars but also their own funds for the disadvantaged in a fiscally equalizing manner. This expansion of scope would have the dual benefits of (1) enlarging the pool of compensatory education funds available to offset disparities in regular per pupil spending and (2) reducing the threat that reallocations of state funds might offset federal efforts to channel extra aid to low-spending districts. In addition, the prospect of earning federal rewards—in effect, federal matching grants—might stimulate some states to devote additional funds of their own to services for disadvantaged children.

Effects and Implications of Intrastate Redistribution

As at the state level, the consequences of redistribution among LEAs would depend on whether it were accomplished within a fixed or expanded budget. With a fixed state total of Chapter 1 funds, redistribution means taking funds from the disadvantaged in one district to help the disadvantaged in another. Chapter 1 participants in the low-spending LEAs would benefit, because the total funds available to them would fall less short of state norms after redistribution than before. At the same time, compensatory education services for children in the higher-spending LEAs would have to be cut back, or some children would have to be dropped from the program. In such a trade-off, disadvantaged pupils in the poorer districts would gain relative to advantaged pupils in the state, while disadvantaged pupils in richer districts would lose relative to advantaged pupils in their own LEAs.

Unattractive as such trade-offs may sound, there is a case for making them when the districts in question are fiscally unequal. Imagine two similar low-income children attending school, one in a high-spending, the other in a low-spending school system. Both, let us say, have difficulty keeping up with their nondisadvantaged peers, and both need extra help to succeed. But if one child's school spends $4000 per pupil while the other's spends $6000, do both need extra help in the same amount? It seems hard to say yes, because one child already receives substantially more educational services (other things being equal) than the other. Attending a meagerly funded school amplifies the effects of economic disadvantage, raising the barrier to educational success. This, in essence, is the rationale for allocating more Chapter 1 funds to LEAs with less funding of their own.

The only way to avoid having to make such trade-offs is to increase the total funds available statewide for education of the disadvantaged. The increased funds could come from larger federal allocations to states (resulting from either interstate redistribution or a larger national appropriation for Chapter 1) or, as suggested above, more resources could be obtained by requiring state sharing of program costs. Large enough increases would eliminate the need to pit one group of the disadvantaged against another. Allocations to low-spending LEAs could grow, while allocations to high-spending LEAs remained the same. (Even so, difficult choices would have to be made: Policymakers would still have to choose between intensifying services for Chapter 1 participants in low-spending LEAs and extending services to additional, currently unserved disadvantaged children around the state.)

Although it is theoretically possible to redistribute funds—even drastically—within a fixed state total, little redistribution to poor LEAs is likely to occur in practice unless the size of the Chapter 1 pie is increased. As the history of school finance reform amply demonstrates, opposition to "leveling down" is always fierce and difficult to overcome at either the federal or the state level. Additional funding to permit "leveling up" may be the essential condition for redistributive policy.

Chapter Four

OPTIONS FOR LEVELING THE STATE-LOCAL EXPENDITURE BASE

The fundamental limitation of the strategy of redistribution of Chapter 1 funds discussed in Chapter Three is that the means are disproportionate to the ends. The reallocation of only $6 billion, or even twice $6 billion, in federal aid for compensatory education has little chance of offsetting the inequitable distribution of more than $200 billion regular state and local education dollars, especially when the allocation of compensatory education funds has to reflect mainly the distribution of disadvantaged pupils. As a practical matter, if the goal is to give the typical economically disadvantaged child in America significantly greater (hence compensatory) educational resources than the typical advantaged child, the strategy must include substantial equalization of the state-local expenditure base. In this chapter, I consider what the federal government might do to reduce both interstate and intrastate disparities in regular per pupil spending.

EQUALIZATION OF SCHOOL SPENDING AMONG STATES

The federal government has limited options—and no inexpensive ones—for reducing disparities in per pupil spending among states. It cannot order low-spending states to spend more or high-spending states to spend less. Conceivably, the government could elicit additional spending from some currently low-spending states by making eligibility for federal categorical aid contingent on a minimum level of fiscal effort to support education, but little good would be accomplished. The distributional effects would be erratic; the federal education aid programs are too small to provide much leverage; and denying aid to the disadvantaged in low-spending states would be counterproductive.[1] Essentially, the only serious option for reducing the present gaps in spending among the states is to fill them with (mainly) federal funds. With enough new federal money, presumably in the form of general-purpose education aid, education spending could be substantially equalized across the country. Remote as the immediate prospects for such funding appear, I consider, with an eye

[1]The effects would be erratic because, while some low-spending states are also low-effort states and might be forced to increase spending, other low-spending states already exert above-average effort and would be unaffected. At the same time, some relatively high-spending but low-effort states would be forced to boost their spending, thereby adding to existing disparities. The federal government appears to lack sufficient leverage because federal aid is likely to be small compared with the costs that some low-spending states would have to incur to bring their spending up to the national level. A state probably would not be inclined to incur additional education expenses of, say, $500 million to preserve $50 million in federal Chapter 1 funds.

to the future, how federal funds might be deployed to produce the intended leveling effects.

Numerous proposals have been made over the years for major federal involvement in general school finance. The National Education Association, for example, has long espoused "one-third, one-third, one-third" federal, state, and local funding. Various bills to establish a program of general aid to education have been introduced in Congress (especially during the 1970s, when school finance equity was high on the education policy agenda), but none has come close to enactment. The Fair Chance Act, introduced by Rep. Augustus F. Hawkins in 1990 (HR 3850, 101st Congress), included a proposal along similar lines. This bill, which would have combined incentives for intrastate equalization (discussed below) with grants for interstate equalization, called for the federal government to allocate aid to "move all States up to the level of funding the Secretary [of Education] determines to be necessary to assure a good education for all children."

How much federal money would be required? Naturally, the answer depends on how much equality is wanted. Obviously, it would take less federal aid to bring each state's per pupil expenditure up to the national average (about $5450 in 1991–1992) than to boost each state's spending to the much higher levels of Connecticut or New York (over $8000). In addition, the cost would depend on the feasibility of focusing federal aid tightly, providing it only to the low-wealth or low-expenditure states whose spending levels are to be elevated. If it were deemed necessary for political reasons to spread federal aid over all or most states, with only a moderate equalizing tilt in favor of the less wealthy states, the total cost would be much higher. As an indication of the orders of magnitude involved, consider the following:

- In 1989–1990, the federal government would have had to spend $15.9 billion to bring every state with per pupil expenditure below the national average (then $4622) up to the national average. Bringing all states up to the level of the median state ($4357 per pupil—the level in Colorado) would have cost $10.4 billion.[2]
- In the same year, $20.7 billion would have been needed to bring every state up to the minimum level of per pupil spending enjoyed by the top one-third of states ($4786—the level in New Hampshire); $29.8 billion to bring every state up to the level of the top one-fourth of states ($5090—the level in Michigan); and a stupendous $99.1 billion to bring every state's spending up to that of the fifth-ranked state, New York ($7051).

Moreover, these estimates would be much higher were they not based on the politically unrealistic assumption that *zero* aid would go to states already spending above the specified target levels. To put the foregoing amounts into perspective, note that total federal financial aid to elementary and secondary education in 1989–1990 amounted to about $12.8 billion (NCES, 1992).

[2]These estimates are calculated from data on enrollment and per pupil expenditure by state in NCES (1992).

Designing a formula for allocating general-purpose, equalizing education grants to states is not a difficult technical problem. At least three sets of prototypes exist: First, the same types of formulas as some states use to equalize spending among their LEAs could also be used to distribute federal equalizing grants to states. Second, formulas used to distribute other types of federal aid to states could be adapted to the distribution of general aid to education. Examples include the vocational education formula mentioned above and the formulas of such noneducation programs as AFDC, Medicaid, and the former General Revenue Sharing program, all of which distribute (or distributed) aid in an inverse relationship to state fiscal capacity. Third, the formulas that such other federal countries as Canada and Germany use to distribute aid to states and provinces also provide useful models, especially because they are more explicitly and strongly redistributive than the formulas typically used in the United States.

I make no attempt here to compare distributions according to alternative formulas or to suggest which formula is "best"; however, to convey some feeling about how equalization might be accomplished, I mention the following specific possibilities:

- The federal government could use the same type of *foundation* formula to establish a spending floor for states as many states use to set a floor under the expenditures of local school districts. Under such a plan, (1) the government would set a minimum (*foundation*) level of expenditure per pupil that each state would be guaranteed—e.g., $5000 or $6000 per pupil; (2) each state would be expected to exert at least a certain fiscal effort—that is, use at least a certain percentage of state income to support education; and (3) the gap, if any, between the foundation level and what the state raises at the specified rate of fiscal effort would be filled with federal aid. States rich enough to pay for the foundation level of spending out of their own resources (at the specified rate of effort) would receive no federal funds.

- According to the type of formula used in the AFDC and Medicaid programs, the federal *share* of spending per pupil varies inversely with state fiscal capacity. If such a formula were used to distribute general education aid, the federal share of base expenditure per pupil might be set at, say, 30 or 40 percent for the poorest states but allowed to fall, perhaps even to zero, for the wealthiest states. The federal government would agree to finance the specified share of each state's education spending up to some stipulated limit, such as $6000 per pupil. This mechanism affords more flexibility than the foundation formula, but it could turn out to be more costly if it allocated funds to states with substantially above-average wealth.

- A third option derives from the class of state school finance plans known variously as *guaranteed yield* or *guaranteed tax base* formulas. These formulas, as used by states, are intended to ensure that even the poorest local school district can generate as much revenue per unit of tax effort as it would generate if it had a certain minimum tax base per pupil. An analogous federal formula could be designed to guarantee each state at least a minimum increment in expenditure per pupil for each percentage point of gross state product (GSP) that the state devotes to education. Federal aid would make up the difference, if any, between

what the state actually raises and the guaranteed amount. This type of formula, like the type discussed immediately above, could be designed either to focus funds tightly on the low-income states or to distribute federal general aid more widely.

These examples bring out the important distinction between *lump sum* and *matching* formulas. Lump sum formulas (for instance, the foundation formula mentioned above) distribute aid according to such fixed state characteristics as fiscal capacity, but without regard to how much the state itself chooses to spend on education. Matching formulas (such as the guaranteed yield type) link the amount of federal aid to the state's own spending. Matching formulas create fiscal incentives for states in the sense that a state can earn more federal aid by spending more of its own money on education. Thus it may be possible, with an appropriately designed matching-grant formula, to reduce the cost of fiscal equalization to the federal government by drawing in nonfederal funds.

Among other issues that would have to be considered in designing a federal equalization formula are whether adjustments should be made (and if so, how) for interstate differences in educational needs, the cost of educational resources, and perhaps other expenditure-related factors. In addition, the federal government would have to set formula parameters that control the degree of fiscal equalization. I do not pursue these matters further in this report, although all would have to be addressed in formulating a concrete policy proposal.

What can be said about the merits of interstate equalization through federal general aid? Is it feasible? Would it work? Would it be worth the money? I offer five observations.

First, technical feasibility is not a major issue. Given sufficient funds, a formula can be designed to reduce interstate differences in per pupil spending to virtually any desired degree. This does not mean there would be no difficulties. Steps would have to be taken, for example, to limit supplanting—i.e., the substitution of federal aid for state and local support for the schools. Various questions about measuring fiscal capacity and effort would have to be resolved. From a broad policy perspective, however, the main significance of the technical issues is that they affect the trade-off between equalization and cost. That is, the more the equalizing effects of the formula are moderated (perhaps to broaden political support), the more federal aid would be required to reach a given standard of expenditure equality.

Second, although interstate equalization would certainly improve the relative positions of disadvantaged pupils in formerly low-spending states, the problem of intrastate inequality would remain. Additional federal policies would be needed to promote equalization among the local districts in each state. However, the two issues are not entirely separate. I consider below the possibility that the federal government could use general equalizing grants to states to promote intrastate equalization as well by linking the size of each state's grant to the equity of the state's school finance system.

Third, to reduce expenditure disparities among the states substantially would require an immense amount of federal money—several times the $6 billion cost of Chapter 1 itself and more than what the government now spends on all its elementary-secondary education aid programs. Arguments about the potential benefits to the disadvantaged seem much too narrow, by themselves, to justify a federal effort of such magnitude. We are speaking here of a drastic change in the U.S. education finance system, involving shifts of perhaps tens of billions of dollars and a major new federal role—all to enhance the return on the 2.5 percent of education funds devoted to the federal Chapter 1 program. Realistically, a proposal for large-scale general aid would have to rest on much broader considerations, such as the adequacy of U.S. investment in education and the likelihood of significant gains in educational performance. Even the equalization aspect would have to be tied to educational equity for pupils in general, not just for the one out of eight pupils involved in compensatory education.

Fourth, a proposal for general equalizing aid would have to withstand comparison with other potential uses of additional education funds. Several billion new federal dollars could be used, for example, to support a nationwide school improvement effort, to make preschool education universally available, or—let us not forget—to serve millions of additional low-income children in Chapter 1 within its present framework. It is not at all evident that if Congress suddenly found, say, an extra $10 billion to spend on education, it would (or should) place interstate equalization of educational resources at the top of its list of priorities.

Fifth and finally, Congress is very unlikely to create a multibillion dollar new program of general education aid under current economic and fiscal circumstances. Even with a resumption of stable economic growth, budget stringency at all levels of government will doubtless continue for the coming years. At the federal level, deficit reduction (if not tax cutting) will probably take precedence over expanded aid to state and local governments, and federal social programs are as likely to be trimmed back as expanded. Any increase in education funding is likely to be absorbed either by existing programs (including Chapter 1) or by high-profile but limited-scale school reform initiatives. In sum, it seems neither fiscally nor politically plausible that Congress will establish a large general education aid program anytime soon.

FEDERAL INCENTIVES FOR INTRASTATE EQUALIZATION

Whether or not something is done about interstate disparities, the wide variation in regular expenditure per pupil among local school districts remains a problem. In theory, the federal government has three broad options for promoting intrastate equality:

- Direct federal equalizing grants to LEAs
- Federal pass-through grants to states—that is, grants that states are supposed to distribute among LEAs in a fiscally equalizing manner
- Federal incentives to states to reduce expenditure disparities among districts.

However, both nonincentive methods—direct grants and pass-through grants—have serious limitations and low probabilities of successful implementation. After discussing these options briefly, therefore, I focus on the least direct but most promising approach, federal incentives for intrastate equalization.

Limitations of Nonincentive Approaches

Direct federal general aid might seem to offer a way to reduce disparities among local districts as well as among states. That is, one might contemplate filling the expenditure gaps between wealthy and poor LEAs with targeted federal grants. But this vision collapses quickly when confronted with the realities of how local school systems are financed in the United States. The key points have already been made in connection with proposals to redistribute federal Chapter 1 funds among LEAs. To summarize briefly, the direct federal grant strategy seems infeasible for the following reasons:

- States differ with respect to state and local roles in financing education, and hence in the degree to which local school spending is related to local wealth or fiscal capacity.
- Moreover, some states have already done much more than others to reduce intrastate disparities in spending and to compensate for interdistrict differences in capacity, costs, and educational needs. Hence both the need for a federal gap-filling role and the form that federal aid would have to take vary widely from one state to another.
- The federal government lacks the capacity to develop a formula that could cope with the aforesaid diversity. Probably no single formula would suffice. In effect, the distribution of federal aid would have to be customized to fit the situations of all 50 states.
- Even apart from the problem of diversity, the federal government lacks the national data that it would need to construct an LEA-level equalizing formula—for example, data on local fiscal capacity, tax base, or wealth (not to mention local costs of education and education needs).
- Finally, the fact that both states and LEAs can respond to, and offset, federal aid raises doubts about whether any form of direct federal aid to LEAs would have the intended redistributive effects.

If the direct allocation of equalizing aid to LEAs will not work, what about giving the aid to states, subject to the condition that they redistribute it to LEAs in a fiscally equalizing manner? This suggestion, too, parallels one that was discussed above in connection with the redistribution of Chapter 1 funds among LEAs. Clearly, the states could perform the equalizing role if they were so inclined. But could the federal government define standards or modes of equalization unambiguously enough, and enforce its requirements rigorously enough, to ensure that states would distribute funds as intended—even if the states' own preferences and priorities lay elsewhere? Note that the federal government would be demanding no small thing: It

would be expecting the states to rectify with federal funds the inequities that they, the states, had themselves created.

At the technical level, the question is whether the federal government could formulate clear enough standards or guidelines and enforce them firmly enough to ensure that states would distribute federal funds in the intended fiscally equalizing manner. Again, the diversity of state systems poses a major obstacle. No single federally prescribed type of allocation formula would be appropriate, for the reasons listed above. As we have already learned from experience, establishing general guidelines is ineffective. For example, simply telling states to distribute federal aid in a manner that offsets expenditure disparities would have minimal effect unless a specific degree of offset were required. Directing the states to distribute in an inverse relationship to local wealth would do little good unless the required steepness of the relationship were specified precisely. But precise specifications would have to be state-specific to reflect the nature and severity of each state's fiscal disparity problem. Federal bureaucrats, in other words, would have to analyze each state's school finance system and come up with detailed, state-specific requirements for using federal aid.

We should not reject out of hand the possibility that this approach might work, but the pertinent history is not encouraging. The federal government has not performed well in the past in formulating effective requirements for state targeting of federal education funds (as in the above-mentioned case of vocational education), and such requirements as have been developed have often been laxly enforced. Having to produce state-specific requirements would vastly complicate the task. Conceivably, the federal government could overcome the problems and forge general aid passed through states into an effective instrument, but the probability of success seems too low to provide a foundation for federal policy.

Overview of Incentive-Based Approaches

The federal government appears better able to do indirectly, through incentives, what it probably cannot do with either direct or pass-through grants to LEAs—namely, level out disparities in per pupil expenditure among local districts. An incentive-based approach, for the purpose of this discussion, would make the amount of federal education aid to a state (or a state's eligibility for aid) contingent on the degree to which the state has achieved intrastate fiscal equality.

The fundamental reason for believing that incentive-based approaches can work is that each state has full power to control the distribution of spending among its own local school districts. State legislatures decide not only the level and distribution of state financial aid to LEAs but also the rules according to which LEAs can raise their own property taxes or other local revenue for schools. A state intent on equalizing education expenditure could take any or all of the following steps to accomplish that goal: (1) tilt the distribution of state aid more in favor of lower-wealth, lower-spending districts, (2) finance a larger share of education expenditure from state rather than local revenue, (3) restrict the authority of local districts to raise revenue from local taxes, and even (4) alter district boundaries or consolidate districts to reduce disparities in wealth. The ultimate weapon is "full state assumption," which, as the

term suggests, would eliminate the local role in raising funds for education and the associated fiscal inequality.

Every state, therefore, could equalize funding among its districts if it were sufficiently motivated. Some states have already done so to a substantial degree—some long ago, some recently; some voluntarily, others under court order. But fiscal equalization is politically painful. It always entails some combination of redistribution of educational resources among communities or the imposition of higher taxes to pay for "leveling up." Either can cut short the career of a state official. Under the circumstances, can federal incentives be made strong enough to overcome the economic and political costs, or attractive enough to make redistribution palatable? I discuss three types of equalization incentives: (1) making some degree of intrastate equalization a prerequisite for Chapter 1 grants, (2) linking the amount of a state's Chapter 1 aid to the degree of fiscal inequality among its districts, and (3) using federal general education aid to states as the reward for intrastate equalization.

Fiscal Equalization as a Prerequisite for Chapter 1 Funding

The potential effectiveness of Chapter 1 depends on its supplemental character, which in turn depends on equality of base expenditure across LEAs. Thus, we might reasonably consider whether some degree of intrastate fiscal equalization should be a condition of eligibility for Chapter 1 funds. Making equalization a prerequisite would give states a crude but clear incentive: reduce interdistrict disparities or lose federal aid. The incentive effect could be amplified by putting at stake not only Chapter 1 funds but also other federal education aid. Representative Hawkins proposed this approach in his Fair Chance Act, under which a state would receive aid only if it either (1) satisfied a federally specified equalization standard or (2) committed itself to a plan for meeting the standard within five years.[3]

Although making Chapter 1 grants contingent on equalization may seem like a radical proposal, one may also view it as an extension of the long-established Chapter 1 principle of *comparability* between Chapter 1 and non-Chapter 1 schools. The comparability requirement dates from the early years of the federal compensatory education program. Soon after the program (then ESEA Title I) was established, some LEAs were found to be using Title I funds to pay for the same services in Title I schools as were being paid for with state and local funds in other schools. Instead of providing supplemental services, these Title I funds were supporting parts of the regular education program—services that Title I participants would have received from their LEAs even in the absence of federal aid. Congress responded by establishing the comparability requirement, under which, roughly speaking, each LEA must allocate regular state and local resources to its Title I (now Chapter 1) schools in amounts at least equivalent to those provided elsewhere in the district.

[3]Under Rep. Hawkins's proposal, however, an ineligible state would not actually lose the aid to which it would otherwise be entitled. Instead, the federal government would somehow allocate the funds directly to LEAs (bypassing the state government) in a manner designed both to "carry out the purposes for which such funds were made available" and to meet the specified equalization standards. The details of this allocation process were not specified.

One might say that the reason Chapter 1 services in poor LEAs often are not supplemental by state standards is that the comparability rule now applies only to the schools within an LEA and not to LEAs within a state. As Taylor and Piché (1990) have pointed out, the limited reach of the comparability requirement, coupled with expenditure inequality among LEAs, creates a situation in which "Chapter 1 funds may be used in property-poor districts to furnish services [to Chapter 1 students] that are routinely available to all students in property wealthy districts." If the comparability rule were elevated from the LEA level to the state level, states that wanted to remain eligible for Chapter 1 funds would have to raise base expenditures in all their Chapter 1 schools to a specified statewide standard. The Commission on Chapter 1 (1992) recently recommended the enactment of a statewide comparability rule.[4] In practice, imposing such a requirement would be almost equivalent to making Chapter 1 funding contingent on a specified degree of interdistrict fiscal equalization.[5]

A problem with the proposal for a statewide comparability rule is that imposing such a rule suddenly and by itself (without accompanying federal aid) might force some states out of the Chapter 1 program. States with large interdistrict disparities might be obliged to spend several times as much as they receive in federal Chapter 1 funds to meet even a moderate equalization standard. Rather than bear this burden, some states might forgo their Chapter 1 funds. The likelihood that some states would be put in this intolerable no-win situation would seem to render this approach politically infeasible—at least in its raw form.

Certain modifications, however, might make statewide comparability a more acceptable option. The delayed implementation feature of the Fair Chance Act offers one approach—giving several years' notice before the rule becomes binding. Another is to begin with a low standard of comparability—one that all but a few states can pass—and then to gradually raise the standard over time. Initially, for example, the requirement might be to fund all Chapter 1 schools at no less than, say, 75 percent of the statewide median; later, the standard could be raised to the median and, ultimately, to a higher percentile. Still, even a softened comparability rule has an undesirable all-or-nothing character: A state either qualifies for its full allotment of aid or for no aid at all. This rigidity can be avoided with some alternative approaches.

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[4]The commission has recommended a requirement for comparability of "essential educational services" rather than comparability of expenditure per pupil (Commission on Chapter 1, 1992). However, because the commission's expansive list of "essential" services includes such key expenditure-related items as pupil-staff ratios and the education and experience of teachers, the requirement for comparability of services would not differ much from a requirement for comparability of expenditures, except that it would allow expenditure differentials associated with differences in costs.

[5]I say "almost equivalent" because a statewide comparability rule would apply only to expenditure levels in Chapter 1 schools, not to expenditure levels of whole districts. In practice, however, this would be a distinction without much of a difference because a large percentage of all schools—71 percent of all public elementary schools, according to U.S. Department of Education (1992)—are Chapter 1 schools. Although, in theory, a state could act to bring up only the Chapter 1 schools to the stipulated comparability standards, to do so would be to create a two-class system in many school districts, leaving the non-Chapter 1 minority of elementary schools funded at lower levels than the Chapter 1 schools. It is not plausible that such a pattern would long prevail.

Linking Chapter 1 Funding to the Degree of Intrastate Equalization

Instead of making eligibility for aid an all-or-nothing proposition, a more flexible approach would offer rewards in the form of additional Chapter 1 funding (or penalties in the form of reduced funding) to states that meet (or fail to meet) specified standards of fiscal equality. The incentive mechanism could take various forms, depending on how expenditure equality is defined and measured and how the degree of equality is connected to the level of federal aid.

One possible model for this approach to incentives comes—surprisingly—from a provision of the federal statute authorizing grants for construction of highways. The provision concerns the 55-mile-per-hour speed limit. The federal government lacks the authority to set a national highway speed limit directly, but under the Surface Transportation Assistance Act of 1982, it seeks to limit speeds to 55 miles per hour by mandating a reduction of 5 percent in the aid allocation of any state that fails to impose such a limit. The analogy is obvious. The federal government has no power to order states to equalize education spending among their districts, but it could reduce each state's Chapter 1 allocation by a set percentage if the state failed to pass a test of fiscal equality.

The government could also develop more sophisticated and flexible reward or penalty systems. Instead of setting only a single equity threshold and a single reward or penalty, the government could define multiple, progressively more stringent thresholds, linked to progressively larger rewards. For instance, a state that satisfied only a minimal standard of equity might earn 5 or 10 percent extra Chapter 1 funds, but a state that eliminated all but negligible disparities might receive an extra 25 percent. Alternatively, a continuous reward schedule, defined by a formula, might link the size of each state's Chapter 1 grant to an index of fiscal inequality among the state's local school districts. A state's fiscal disparity score would become, under the latter approach, a key factor controlling the state's formula-based allocation of Chapter 1 funds. (Disparity measures are discussed below in this chapter.)

General Education Aid to States as the Incentive for Intrastate Equalization

Much of what has been said about using extra Chapter 1 funding as an incentive applies also to the option of using general education aid, but with some important differences. The first is the potential difference in scale. Chapter 1 grants are likely to be small compared with the costs of equalizing base expenditure among a state's districts. Incentives that involve fractional additions to, or reductions in, Chapter 1 funding—say, a 10 percent bonus for states that meet an equity standard—may be too weak to have much effect. Were the federal government to establish a program of general aid to education, it would presumably fund the program on a larger scale, and it could make the incentives correspondingly more potent.

Second, the federal government would have more freedom of action in using general aid as an incentive than in using Chapter 1 funds. Chapter 1 funds have a specific purpose: They are supposed to be distributed mainly according to the incidence of

poverty and used to support supplemental services for the disadvantaged. Raising or lowering Chapter 1 allocations to encourage intrastate equalization could interfere with this function. The distributional effects could even be perverse: The Chapter 1 participants in a fiscally unequal state, already harmed by unevenly distributed base expenditure, would be harmed further if some Chapter 1 funds were withdrawn. Because general aid would not be linked to particular programs, pupils, or services, this adverse side effect could be avoided if allocations of general aid rather than Chapter 1 funds were made conditional on intrastate fiscal equity.

General aid and incentives for equalization are a natural combination. By distributing general aid in amounts linked to intrastate equalization, the government could simultaneously promote equity within and across states and provide resources for, say, efforts to raise the quality of schools. Although general aid would not be earmarked for particular purposes, states could view it as a federal contribution to the cost of equalization. Specifically, general aid could be portrayed as federal sharing of the cost of leveling up a state's low-spending districts. Because the uses of general aid would be unrestricted, states would value each dollar of general aid more highly than a dollar of categorical aid. The incentive effect per dollar would be correspondingly stronger.

Many aspects of the design of an incentive system would be unaffected by whether rewards took the form of general aid or increments in Chapter 1 funding. In particular, the problems of measuring fiscal equity and formulating equity standards would remain the same. The reward-for-equity schedules, however, would probably look quite different if general aid rather than incremental Chapter 1 funding were the prize. Free of concern that the disadvantaged might be adversely affected, the government could raise both the stakes and the standards. More states might receive offers too good to refuse.

An incentive system based on general aid would, however, raise the issue of how to distribute such aid—or, more precisely, the opportunity to earn such aid—among the states. If general aid had no purpose other than to stimulate intrastate equalization, a very simple solution might make sense: offering all states the same federal aid per pupil for reaching a given equity standard. But because the federal interest extends to interstate as well as intrastate equalization, there is a potential conflict between allocation criteria. Some high-income, high-spending states (e.g., New York and Pennsylvania) are also states with large interdistrict disparities. A general aid formula oriented toward interstate equalization would give them relatively small grants. But if the potential rewards for intrastate equalization were small, while the costs were high, such states might not be swayed by the federal incentives. A policy of offering larger rewards to states with larger equalization problems seems unacceptable, however, as it would reward states for having operated inequitable systems. Thus, policymakers would have to consider carefully what trade-off to make between the goals of interstate and intrastate equalization.

Although the federal government now has no program explicitly labeled general education aid, one existing program, Chapter 2 Block Grants, distributes what are, for all practical purposes, unrestricted grants. This characteristic makes Chapter 2 a possi-

ble statutory foundation on which to build a fiscally equalizing general aid program and a concrete illustration of how such a program might work.

Chapter 2 Block Grant funds, currently funded at only about one-half billion dollars per year, are allocated among states in proportion to each state's school-age (5–17) population. An equalization grant program would have to be much larger to provide meaningful incentives—perhaps three or four times as large to start, with subsequent increases to the $10 billion-plus range. Either the same simple formula as used in the current Chapter 2 program or a formula inversely related to state fiscal capacity could be used to determine each state's potential allotment of federal equalization aid. The key difference, however, is that under the Chapter 2 program, the formula determines the actual amount of aid that a state receives, whereas under the hypothetical incentive grant program, it would determine the *maximum* amount of aid that a state could *earn*. The percentage of this maximum that a state actually received would depend on the degree of inequality in education spending per pupil among the state's local school districts. The most highly equalized states would receive the full amounts calculated from the formula, but states with less equitable financing systems would receive only fractions of the calculated maxima. Those with the most egregious disparities might receive no aid at all. Thus, the formula would reward states for their success in leveling out spending among their localities.

These incentive grants would be considered general-purpose federal education aid to the states. They would not be earmarked for particular uses or beneficiaries. States would not be obliged to account for their use or to distribute them in any particular manner to school districts. The intent is that each state would add the federal funds to the state funds that it distributes as general state aid to local school districts. The federal dollars would be counted fully, in the same manner as state and local dollars, in measuring the degree of fiscal equity among a state's school districts. The federal government might reasonably attach such provisions as a strong maintenance of effort requirement to encourage the states to use the federal aid to supplement state and local education funds, but such provisions would be incidental rather than essential to the purpose of rewarding states for making their school finance systems more equitable. Of course, federal incentives for intrastate equalization would not necessarily have to be tied to Chapter 2, but it seems worth noting that a legislative instrument already exists through which the concept might be implemented.

Disparity Measures and Standards

Equity measurement would be a central concern under any incentive-for-equity plan. Allocations of millions of dollars in federal aid would hinge on the states' equity ratings, and hence on the choice of particular indicators and standards. Establishing federal equity measures and standards could also have implications far beyond the Chapter 1 program, because such standards would almost certainly be cited, and could become influential, in debates and litigation over school finance reform. The existence of satisfactory equity standards therefore becomes a key question in assessing this family of policy options.

The idea of federally established standards of intrastate school finance equity is not new. Such standards are already established in law. They have been in effect since 1974 in the federal Impact Aid program, which provides general-purpose grants to LEAs "impacted" by the presence of "federally related" children in their schools. A provision of the Impact Aid statute (P.L. 81-874, section 5(d)(2)) says that a state may not take federal Impact Aid payments into account in distributing its own education aid to LEAs unless the state meets either a *disparity* standard or a *fiscal neutrality* standard of fiscal equity.[6] The disparity standard is based on an indicator called the *federal restricted range ratio*, which is defined as the percentage difference between per pupil spending of the LEA at the 95th percentile of a state's expenditure distribution and per pupil spending of the LEA at the 5th percentile of the distribution. The standard is that this percentage may not exceed 25 percent. The fiscal neutrality standard is that no less than 85 percent of the total state and local revenue of a state's LEAs must be "wealth neutral," which means allocated so that each LEA, regardless of wealth, receives the same number of dollars per pupil for a given tax effort.[7] As of 1990-1991, only seven states qualified under one or the other of these standards and thus earned the right to take Impact Aid grants into account in distributing their own funds.

The same two equity indicators were also written into Rep. Hawkins's Fair Chance Act—but with much more stringent threshold requirements. A state would qualify for federal education aid under the Hawkins bill only if the difference between its 95th percentile and 5th percentile spending levels were less than 5 percent, or if 95 percent of its state-local education revenue were distributed in a fiscally neutral manner. These stringent criteria come close to a requirement for full statewide expenditure equality.

Equity measurement is a complex subject. School finance experts have done a great deal of work on it and developed many different indicators. Rather than review these indicators here, I refer the interested reader to the comprehensive discussion in Berne and Stiefel (1984). The following remarks focus narrowly on how equity should be measured for the specific purpose of rewarding or penalizing states based on the degree of fiscal inequality among their local districts.

The literature recognizes various concepts of school finance equity—horizontal equity (or its opposite, disparity), vertical equity, equal opportunity, and fiscal neutrality. Two of these concepts, disparity and fiscal neutrality, are reflected in the aforementioned Impact Aid standards. Not all these concepts relate equally, however, to the present discussion of equity in connection with Chapter 1.

In my view, only disparity measures should be considered in judging whether a state has adequately leveled the fiscal base on which Chapter 1 funds are to be superimposed. A fiscally neutral finance system, which affords rich and poor LEAs "equal

[6]The statute also establishes a third criterion, based on "exceptional circumstances" that prevent a state from satisfying the other criteria, but no state has ever qualified under it.

[7]Detailed specifications of the Impact Aid disparity and fiscal neutrality tests, including examples, are set forth in the federal program regulations (34 CFR sections 222.60-222.66 plus appendix to part 222).

yield for equal effort" but not necessarily equal resources or services, does not provide an equal educational base for disadvantaged children in districts whose effort is low. I focus, therefore, on the choice of a disparity measure.

Many different statistics have been devised to measure interdistrict disparities. Berne and Stiefel (1984) analyze 11 measures: the range, the restricted range, the federal range ratio, the relative mean deviation, the McLoone index, the variance, the coefficient of variation, the standard deviation of logarithms, the Gini coefficient, Theil's measure, and Atkinson's index. Each measure has many variants, depending on (1) the particular expenditure variable to which the statistic is applied, (2) whether the statistic is calculated with or without weighting each LEA's expenditure by the LEA's enrollment, and (3) whether the expenditure data are adjusted for interdistrict variations in cost, educational need, district size, and other expenditure-related factors.

Different equity statistics do not necessarily yield consistent results; a state can look significantly more equitable according to one indicator than another. This is not a technical shortcoming. Some indicators are deliberately designed to reflect only particular aspects of inequality or to emphasize some aspects more than others (the McLoone index, for example, reflects inequality only among districts that spend at or below the statewide median). Nevertheless, it is an important consideration in designing an incentive mechanism, because the choice of indicator could determine whether certain states pass or fail an equity test.

In state studies of school finance equity, analysts often use three, four, or more different equity measures. Allowing states to qualify for rewards according to alternative measures might also make sense under a federal incentive plan. However, using multiple statistics would be more difficult with complex incentive plans that link funding to the degree of equity than with simple schemes that depend merely on whether a state has reached a certain equity threshold.

In choosing an indicator for incorporation into a statutory incentive provision, I would favor (1) simpler and more familiar statistics, (2) statistics of relative rather than absolute disparity, and (3) statistics that take into account expenditure data from all of a state's LEAs, not just LEAs at the extremes. These criteria would lead me to avoid such relative exotica as the Theil and Atkinson measures and, among the simpler measures, to prefer the coefficient of variation to the range-ratio statistic now used in Impact Aid. The criteria are certainly debatable, however, and other analysts may reach different conclusions.

A major question in selecting an indicator is whether the fiscal disparity statistics should be adjusted for interdistrict variations in costs and educational needs. In principle, adjusted (constant dollar) spending provides a more valid measure than unadjusted spending, and it is fairer to take into account than to ignore the fact that districts have varying percentages of special-need, costly-to-serve pupils. The problem is that we lack the information needed to make nationally consistent adjustments. Few states have district-level cost indexes (not to mention valid ones), and agreement is lacking about the appropriate extra weight (higher relative cost) to be

attributed to each type of special-need pupil. Therefore, we cannot currently produce cost-adjusted, need-weighted statistics for all states.

We are left for now with the option of allowing, but not requiring, states to adjust for cost and need. This is the current approach in the Impact Aid regulations.[8] It is better than nothing, but hardly optimal. On the positive side, it avoids penalizing a state that has seemed to make expenditure unequal by taking cost and need variations into account in distributing funds. On the negative side, it fails to penalize states that allocate funds without adjusting for cost and need differentials. But short of developing district-level cost indexes for the whole country and prescribing nationally uniform need weights, the federal government can do little more. The lack of proper need and cost adjustments is a serious—but not fatal—shortcoming of the available equity measures.

In sum, we should be able to develop indicators that are acceptable, albeit imperfect, for the purpose of comparing interdistrict disparities in spending across states. Further refinement will be possible, but until such refinement occurs, leeway should be built into any federal mechanism that rewards or penalizes states on the basis of their disparity scores. Leeway may consist of permitting optional adjustments for need, cost, and district size differentials; excluding certain inherently disparate categories of expenditure, such as spending for pupil transportation; and perhaps allowing states to qualify for financial rewards under alternative equity standards.

Other Design Considerations

In addition to equity measures, several other aspects of the design of an incentive system need to be considered. One is the size of rewards or penalties. We cannot reasonably expect states to incur large costs to level up spending in their districts in exchange for small increases in federal aid. Such relatively modest awards as 5 or 10 percent increments in Chapter 1 funding probably would work only in states already close to specified equity thresholds or on the verge of reforming their systems for reasons of their own. (The prospect of losing an equally small percentage of aid by not meeting an equity standard might be a somewhat stronger incentive, because the penalty would convey the message that state authorities had "done something wrong.") I do not mean to suggest that rewards must cover the full cost of fiscal equalization in a state; however, they must be large enough to make a significant difference in the state's cost-benefit calculations.

The effectiveness of an incentive will also depend on the structure of rewards. States that are within reasonable range of specified equity thresholds are more likely to act than states that must improve much more drastically to qualify. This is a reason not to set only a single equity standard that a state must meet to earn a reward. A more complex incentive scheme, one with multiple thresholds or a continuous relationship between aid and equity, has the advantage of putting some reward within the

[8]Optional adjustments for need and cost differentials are explicitly allowed in connection with the Impact Aid disparity test (34 CFR, section 222.63).

reach of even initially highly inequitable states. Also, a system of multiple rewards or a continuous reward schedule provides incentives for further equalization to states that already exceed minimum standards.

A third issue concerning the structure of incentives is whether a state should be rewarded only according to the level of fiscal equity it has attained or also for the progress it makes in reducing expenditure disparities. The two criteria would yield very different distributions of rewards. A state that had already established an equitable system would qualify for a reward based on level of equity but not a reward based on equity gains. In contrast, an initially highly unequal state that reduced its interdistrict disparities fractionally after the federal incentive system took effect might receive a reward for equity gains, even though its remaining disparities were still unacceptably high. A narrow calculation of cost-effectiveness might seem to favor rewards for progress made, on the grounds that the federal government would have to provide extra aid only in exchange for current gains in interdistrict equity. Such a policy would itself be unfair, however, and probably politically unacceptable, because it would, in effect, reward the states that have operated the most unequal school finance systems and held out the longest against demands for fiscal equalization. I conclude, therefore, that the level of equity should be the dominant, if not the exclusive, criterion for rewards under a federal system of incentives for equalization.

A fourth issue concerns whether the design of an incentive system should take into account certain differences in state characteristics or circumstances. Among such characteristics are the number and the size distribution of school districts in the state. States with numerous small districts (typically in the Northeast, Midwest, and West) are likely to have to contend with larger wealth disparities across districts than states with county school systems (typically in the South). Other things being equal, it would be relatively easier (and less expensive) for the latter states to satisfy federal equity criteria. Should the number and size distribution of districts be considered in designing an incentive system, or should a state be deemed responsible for these attributes of its districts and, hence, for the distributional consequences?

These and other technical issues would have to be addressed in developing the full design for a system of federal incentives. None of the design problems seems insuperable, however, and none fundamentally alters the case for an incentive-based strategy.

Assessment of Incentives

The incentive approach has the major advantage of assigning to federal and state governments functions that each level is well qualified to perform. The federal government would allocate funds and set equity standards. Each state would decide how best to reduce disparities among its own districts. In contrast, any plan for direct or pass-through federal equalization aid to LEAs would require the federal government to involve itself deeply in the details of state school finance systems—a task that the federal education bureaucracy is not equipped to handle.

The effectiveness of incentives would depend directly on the size of the potential rewards. Modest rewards, such as fractional increments in Chapter 1 grants, would make a difference only where the costs of equalization are low, or where they could combine with other pressures for equalization to tip the political balance in a state. Larger prizes would be needed to produce equalization in states where the costs are high—which is to say, where fiscal disparities are worst. A program of federal general education aid appears to be the only potential source of sufficiently large rewards.

The option of building incentives for equalization into the Chapter 1 program itself has both advantages and disadvantages. The advantages are that the program already exists and it has the largest pool of federal education dollars. One important disadvantage is that Chapter 1 funds cannot be used intensively to promote school finance equalization without the risk of undercutting the program's basic function. Another is that the threat to reduce Chapter 1 funding to unequalized states is not wholly credible. If carried out, it would harm the very disadvantaged children that equalization is intended to help.

A program of federal general aid to education would provide a better vehicle than the Chapter 1 program for federal equalization incentives. Under such a program, the size of each state's general grant would depend on one or more indicators of equity in the distribution of funds among the state's local school districts. Rewards in the form of general aid could be made large enough to be effective, and the government could deploy them more freely than funds earmarked specifically for services to disadvantaged children. Although the federal government now provides no funds explicitly labeled general education aid, the existing Chapter 2 Block Grant program, suitably modified and enlarged, could provide the statutory foundation for fiscally equalizing general grants.

Finally, the effectiveness of incentives for equalization—whatever their form—will depend on various state-specific circumstances. States facing economic and fiscal crises are unlikely to be responsive. A fiscally stressful period like the present one, with many states hard-pressed to maintain funding for basic services, may not be the best time to introduce an equalization plan. But a state's situation vis à vis school finance reform could be a decisive consideration. States facing strong pressure to equalize, whether because of litigation or politics, are more likely to respond to federal rewards or penalties. In some instances, the prospect of increased federal aid may tip the balance in favor of fiscal equality.

CONCLUSIONS REGARDING PROMISING OPTIONS

My conclusions regarding which approaches are promising and worth pursuing necessarily depend on assumptions about the availability of new federal funds for elementary-secondary education. Leveling the state-local expenditure base is potentially a more effective strategy than redistributing Chapter 1 funds to enhance the supplemental character of federal aid for the disadvantaged. The leveling strategy requires billions of new federal education dollars, however, while redistribution can be initiated without raising funding levels substantially. I consider the cases of little or no new federal money, significant funding increases (in the range of 50 to 100 percent of current expenditure on Chapter 1), and large-scale federal aid (a doubling or more of total federal expenditure for elementary and secondary education).

LITTLE OR NO NEW FEDERAL MONEY

In the absence of substantial new funding, the government could improve the relative positions of disadvantaged children in low-spending jurisdictions to a limited degree by redistributing Chapter 1 funds from richer to poorer states and localities. The main reasons that this approach has only limited (though not negligible) potential are that too little Chapter 1 money is available to compensate for disparities in state and local spending, and too much redistribution would undercut the basic purpose of serving disadvantaged children. The government could carry out the redistribution by means of some combination of the following steps:

- Revising the Chapter 1 funding formula to eliminate the present unwarranted skewing of the fund distribution toward richer, higher-spending states. The revision could consist of deleting the present per pupil expenditure factor or replacing it with a more valid index of the cost of education in each state.
- Tilting the distribution in favor of high-poverty places. This could be done to a limited extent by strengthening the existing Concentration Grant provisions in Chapter 1, but a more effective method would be to introduce a new, poverty-weighted formula that gives more aid per low-income child to places with higher concentrations of low-income children.
- Inserting an inverse state fiscal capacity factor or an inverse county per capita income factor into the formula to compensate for inequality in state and local ability to raise funds for education.

- Improving the targeting of Chapter 1 funds by restructuring the formula so that funds would be directed to the individual districts (rather than to the counties) in each state on the basis of local poverty and, perhaps, local ability to raise funds for education.

Two considerations restrict the amount of redistribution that is likely to be acceptable. The first is political. In a zero-sum environment, tolerance for shifting funds to improve the positions of disadvantaged children in low-spending places is likely to be low, because any effective step would result in substantial reductions in grants to the better-off places. The second is the desire to avoid the damage to the Chapter 1 program itself that would result from sharp reductions in funding in many LEAs. Moderate increases in total Chapter 1 funding, perhaps on the order of 10 to 20 percent, would help to assuage the political and programmatic concerns. One thing is clear: The reauthorization of ESEA provides the best opportunity in years (and probably for years to come) to incorporate stronger redistributive features into the formulas, even if their effects are limited initially by tight funding constraints.

SIGNIFICANT INCREASES IN FUNDING

Significant increases in federal education funding would make some of the aforementioned options more potent and more palatable and would open up some important additional possibilities. The enhanced options for redistributing Chapter 1 funds would include:

- Allocating additional Chapter 1 funds by formula to lower-income, higher-poverty states, counties, or LEAs, while maintaining funding levels in most other jurisdictions
- Providing additional Chapter 1 funds to states, specifically for distribution to low-wealth or low-spending districts
- Providing substantial financial incentives, in the form of extra Chapter 1 funds, to states that distribute their Chapter 1 funds in a manner that compensates for local fiscal disparities.

With several billion dollars in additional Chapter 1 funding, there would be no need to take money away from better-off jurisdictions to finance extra aid for lower-spending places, and there would be no concerns about adverse affects on Chapter 1 programs. The prospects for adoption of a more strongly redistributive formula would certainly become brighter.

Alternatively, and perhaps more important, the availability of $3 billion or more in new federal funding would allow initial implementation of a system of incentives for intrastate equity based on general federal aid to education. The funds could be distributed to states according to a formula based in large part on the degree of inequality in per pupil spending among each state's local school districts. This funding mechanism could be erected on the statutory foundation provided by the existing Chapter 2 Block Grant program. A few billion additional federal dollars would still

not suffice, however, to compensate to any significant extent for interstate disparities in base expenditures per pupil.

LARGE-SCALE FEDERAL AID

The most effective way to overcome the adverse effects on the disadvantaged of disparities in state and local education expenditure is to eliminate the disparities themselves. The availability of large-scale federal funding, in the range of $10 to $15 billion, would provide the means for major federal initiatives to reduce (but not eliminate) both interstate and intrastate disparities in regular education expenditure per pupil. Specifically, at such funding levels, it would become feasible to pursue the dual strategy of (1) providing federal general education aid to states in a manner designed to compensate for differences in state fiscal capacity to support education, while (2) creating strong incentives for intrastate equalization by linking state allotments of general aid to the equity of each state's school finance system. At the same time, the government would also have the option of funding the Chapter 1 program at such a level, and in such a manner, that most if not all participants would receive supplemental services by state or national standards.

Despite the uncertain economic prospects and the inhibiting effects of federal deficits, the political prospects may be improving for substantial new federal investment in education. While it is unrealistic to expect what I have characterized as large-scale spending in the coming years, lesser but still significant increases may well materialize. If the prerequisite to redistribution is the ability to "level up," that prerequisite may soon be met, at least to the extent that some of the less-costly equalization options may find places on the policy agenda.

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